

VDOİHİ

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

Cilt 2.3.3.3.3.1.1.3

İsmail YILMAZ

**Matematik / İstatistik / Olasılık**

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**VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.1.1.3**

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## **KÜTÜPHANE BİLGİLERİ**

**Yılmaz, İsmail.**

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*Dili: Türkçe + Matematik Mantık*



*K. Atatürk*

Türkiye Cumhuriyeti Devleti  
Kuruluşunun  
100. Yılı Anısına

## Yazar Hakkında

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

## VDOİHİ

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- ✓ Teorik kabullerle genetikle ilişkilendirilmiştir.
- ✓ Bilgi merkezli değerlendirme yöntemidir.

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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 bulunduğunda 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

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

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

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

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

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

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

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durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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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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herhangi iki ve son durumuna bağlı tek kalan simetrik olasılık

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

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

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

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

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

$fzS_{j_{ik}, j^{sa}, 0}^{DSST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin herhangi iki durumuna bağlı tek kalan düzgün simetrik olasılık

$fzS_{j_{ik}, j^{sa}, D}^{DSST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

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bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

${}^0S_{j_s, j_{ik}, j_i, 0}^{DSST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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durumunun bulunabileceği olaylara göre tek kalan düzgün simetrik olasılık

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$f_z S_{j_i}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_z S_{j_i, 0}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_z S_{j_i, D}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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${}^0 S_{j_i, 0}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

${}^0 S_{j_i, D}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$f_z S_{j^{sa}}^{DOST}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

simetrisinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

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

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# E2

## BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

### Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

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

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

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sırasına göre simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumlarının bulunabileceği olaylara göre çıkarılan eşitlikler kullanılmaktadır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO'nun Çizim 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımların yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların altına simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımın bağımsız veya bağımlı durumla başlamasına göre "Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız/bağımsız-bağımsız" durumları /bağımsız/bağımlı" kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği olaylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları elde edilecektir. Simetriden seçilen durumların bulunabileceği olaylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

Simetrinin durumlarının bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırasına göre verilen eşitliklerdeki toplam ve sınırlı sınır değerleri, simetrinin küçükten-büyükçe sıralanan dağılımlarına göre verildiğinden bu dağılımlarda da aynı sıralama kullanılmaya devam edilecektir. Bağımlı olasılıklı farklı dizilimsiz dağılımlarda olduğu gibi bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda da aynı eşitliklerde simetrinin durum sayıları düzenlenerek büyükten-küçükçe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilecektir.

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{Z, S}^{D, D} = \left( \sum_{k=l}^{\binom{D}{j_s}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{j_s} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \cdot \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l}^{\binom{j^{sa}-j_{sa}}{j_s}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{j_s} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = 1$$

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

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

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

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

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

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

$$\sum_{k=l}^{n} \sum_{j_s = j_s + k}^{n} \sum_{l_s = l_s + k}^{n} \sum_{j_{sa} = j_{sa} - k}^{n} \sum_{l_{sa} = l_{sa} - k}^{n} \sum_{n_i = n + k}^{n} \sum_{n_{is} = n + k - j_s + 1}^{n} \sum_{n_{sa} = n + k - j_{sa} + 1}^{n}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{n} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k}^{n}$$

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

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

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

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

$$2 \leq l \leq l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} \wedge$$

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

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

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

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



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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_{z} S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}^{sa}} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \frac{(l_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(n_{is} - s - k)! \cdot$$

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1$$

$$2 \leq j_s \leq j^{sa} - j_s \wedge$$

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

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

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

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

$$s: \{j_{sa}^1, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3 \wedge s = \Rightarrow$$

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

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

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

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

$$l_s + l_{sa} + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j^{sa}} = \left( \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j_s+j_{sa}-1} \right. \\ \left. \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right. \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

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

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

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

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

$$\sum_{n_i=n-j_s}^n \sum_{n_{sa}=n-j^{sa}+1}^{n-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j^{sa}} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{l_s-1} \sum_{j_{sa}=l_{sa}+n-j_s+1}^{l_s-1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_s-1} \right. \\ \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{j_s=l_s+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s \Rightarrow$$

$$f_z^{DOST}_{j_s, j^{sa}} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

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

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

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

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



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

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

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

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

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

$$D \geq n - l_{sa} \wedge l = k = 0$$

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{zS}^{DOST} = \sum_{k=l} \sum_{(j_s=j_{sa}^s-j_{sa}+1)} \sum_{(j_s=j_{sa}^s-j_{sa}+1)}^{l_s+j_{sa}-l} \sum_{j_{sa}^s=l_s+n+j_{sa}-D} \sum_{n_i=n}^n \sum_{(n_{is}=n_{i_s}+k)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{s_a}+j_s+1)}^{+j_s-j_{sa}}$$

$$\frac{(j_s-2)! \cdot (n_{is}-n_{i_s}-j_s+1)! \cdot (n_{is}-n_{i_s}-j_s+1)! \cdot (n_{is}+j_s-j_{sa})!}{(n_{sa}+j_{sa}-n_{s_a}-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!}$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

$$D \geq n < n \wedge l_{sa} = 0 \wedge$$

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

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

$$s \geq l_{sa} = s \Rightarrow$$

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

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

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

$$D \geq n < n \wedge l_{sa} > D - l_i + 1 \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa})! \cdot (n + j_{sa} - s - j_s)!}$$

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

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

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

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

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

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

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

$$j_{sa} \leq j_{sa}^{i_s} - 1 \wedge j_{sa} - 1 \wedge$$

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

$$s \geq 3 \wedge s \Rightarrow$$

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

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

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

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

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

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

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

$$D \geq n < n \wedge I = j_s - 1 = 0 \wedge$$

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

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^l\}$$

$$j_s \geq 3 \wedge j_{sa} = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(n_{is} - s - lk)!$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j^{sa}}^{ST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^i\}$$

$$i \geq 3 \wedge i = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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

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

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

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

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

$$\sum_{k=0}^{(l_s - l) + (l_i + j_{sa} - l - s + 1)}$$

$$\sum_{n_i=0}^n \sum_{(n_{is}=n-j_s+1)}^{(n_{is}=n-j_s+1)} \sum_{n_{sa}=0}^{n_{sa}=n-j^{sa}+1}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
G_{j_s, j_{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{l_{sa}-l+1}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$D \geq n < n \wedge l \neq i \wedge l \leq D + j_{sa} - s \wedge$

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

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

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

$D > l_{ik} - n \wedge I = k = 0 \wedge$

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

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

$s \geq 3 \wedge s = s \Rightarrow$

$$f_{ZS}^{DOST}_{j_s, j^{sa}} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

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

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

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

$$D \geq l_s < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge 2 \leq l \leq D - l_s + j_{sa} - j^{sa} - l_{sa} \wedge 1 \leq j_s + j_{sa} \leq j^{sa} - j_{sa} \wedge j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge j_s + j_{sa} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge D \geq n < n \wedge I = \mathbb{k} = 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$



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

$$s \geq 3 \wedge \mathbf{s} = s \Rightarrow$$

$$f_Z \mathcal{S}_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D} \frac{l_{ik+j_{sa}-l-j_{sa}^{ik}+1}}{\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_s - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - 1 \wedge$$

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

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

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

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

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

$$j_{sa} - j_s - 1 \wedge j_{sa} \leq j_{sa} - 1 \wedge$$

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

$$j_{sa}^i = s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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



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

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

$$D + l_s + j_{sa} - \mathbf{n} - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

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

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

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

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

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

$$s > 3 \wedge s = \dots \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j_{sa}} \sum_{n_i=\mathbf{n}}^n \sum_{(n_{is}=\mathbf{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_{sa})!}$$

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

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

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

$$2 \leq l \leq D + l_s + j_s - n - 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge j_s + j_{sa} \leq j_s \leq n + j_s - s \wedge l_{ik} + j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge D + j_s - n \wedge I = \mathbb{K} = 0 \wedge j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \leq j_{sa} - j_s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(j_s - l)} \sum_{(j_s = j^{sa} - k + 1)}^{(j_s - l)} \sum_{j^{sa} = j_{sa} + 1}^{(j_s - l)} \right. \\ \left. \sum_{n_i = n}^{(n_i - j_s + 1)} \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - j_s + 1)} \right. \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(j_s - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(j^{sa} - j_{sa})} \sum_{(j_s = 2)}^{(j^{sa} - j_{sa})} \sum_{j^{sa} = j_{sa} + 2}^{l_s + j_{sa} - l} \right. \\ \left. \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa}} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

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

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

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

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

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

$$\sum_{i=l}^{(l_s-1)} \sum_{j_s=j_s}^{l_{sa}-l+1} \sum_{n_i=n-j_s+1}^{n_{is}-j_s-j^{sa}} n_{sa}=n-j^{sa}+1$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{j_{sa}=j_s}^{i_{sa}-1} \sum_{i_{sa}=j_{sa}}^{i_{sa}-1} \right. \\ \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s}^{n_{is}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}} \right. \\ \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_s \wedge$$

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \left. \right)$$

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



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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

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

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

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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

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

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

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

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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

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

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

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

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

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

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

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

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

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

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

$$(D \geq n < n \wedge l \neq k = i l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

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

$$s \geq 3 \wedge s = \dots$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik}}$$

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

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

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

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

$$2 \leq l \leq D - l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq n - j_{sa} \wedge$$

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

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

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

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

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

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

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

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

$$s > j_s - 1 = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \right. \\ \left. \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \right)$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

$$s \geq 3 \wedge s = s \Rightarrow$$

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

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



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

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n_{is} + j_s - j^{sa} - 1)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > 0 \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{sa} \leq j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, j_{sa}^{sa}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{()}$$

$$\sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!} \cdot \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j_{sa}=j^{sa}+1}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_{sa}^s-j_{sa}^s} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k}^{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k} \frac{(n_{is} - s - k)!}{(n_{is} + j_{sa}^s - n - k - j_s)!} \cdot (n + j_{sa}^s - s - j_s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D - j_s - 1 < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = k = 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s \geq 3 \wedge s = s \Rightarrow$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{is} - 1)!}{(n_{is} + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
&\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(n_{is}-s-k)!} \\
&\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s - l - j_{sa} + 2)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_s-1)+j_s-j_{sa}} \sum_{n_i=n}^{(n_i-n_{is}-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}-n_{sa}-1)} \frac{(n_i - l_s - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s - l - j_{sa} + 2)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_s-1)+j_s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j^{sa}}^{OST} = \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\frac{\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{(\quad)} \frac{(n_{is}-s-l_k) \cdot (n+j_{sa}-j_s)!}{(n_{is}+j_s-n-l_k-j_{sa}) \cdot (l_s-l-1)!} \cdot (j_s-l+1)! \cdot (j_s-2)!}{(D-j_s)!} \cdot \frac{(D+j^{sa}+s-n-l_k-j_{sa}) \cdot (n+j_{sa}-j^{sa}-s)!}{(n_{is}+j_s-n-l_k-j_{sa}) \cdot (n+j_{sa}-j_s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - s > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$

$D + j_s - n < l_{sa} \wedge D + l_{ik} + j_{sa} - j_{sa} - s < n \wedge$

$D > n < n \wedge l_k = l_k = 0$

$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^s - j_{sa} - 1$

$\{j_{sa}^s, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s$

$$f_z^{S_{j_s, j^{sa}}^{DOST}} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{j_s = j_s - j_s + 1}^{(j_s - j_s + 1)} \sum_{n_{is} = n_{is} - j_s + 1}^{(n_{is} + j_s - j^{sa})} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{sa} - j^{sa} + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\cdot)} (n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_s - s = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s =$$

$$fz_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{is}+j_s-j_{sa}^s} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa}^s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^s - n - 1)! \cdot (n - j_{sa}^s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+j_{sa}-j_{sa}^{ik}+2}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=n-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{n-j_s+1} \sum_{j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n - n_{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

GÜLDÜZMAYA

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s}^D = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j_s - j^{sa})!} \cdot \\
& \frac{(l_{sa} - j_s - l - 1)!}{(l_{sa} - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_s - j_{sa} + 1)!}{(l_{sa} - j_s - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)} \\
& \frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{POST}^{j_{sa}} = \sum_{k=l}^{a-j_{sa}+1} \sum_{(j_s=)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{n_i=n}^{n} \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n - n_{is} - j_s - 1)!}{(n_{is} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n - l_s - j_s + 1)!}{(n + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa})! \cdot (l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{-lk})}^{( )} \\
 & \frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j_{sa}} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{\Delta} \sum_{i=1}^{\Delta} \sum_{j=1}^{\Delta} \sum_{j^{sa}=j_s+j_{sa}-1}^{\Delta} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{-lk})}^{()} \\
& \frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq n < l) \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j}^{SD} = \sum_{k=l}^{(j_s - j_{sa}^{ik} + 1)} \sum_{(j_s - 1)}^{l_{ik} + l - j_{sa}^{ik} + 1} \sum_{j^{sa} = j_{sa} + 1}^{n_{is} + j_s - j^{sa}} \sum_{n_i = n}^{(n_i - j_s)} \sum_{j_s = n - j_s + 1}^{n_{sa} + j_s - j^{sa}} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_i - n_{is} - 1)!} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = 2)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}$$



$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + j_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_s - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=1}^n \sum_{(j_{sa}=j_s+1)}^{(i-j_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$j_{i_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_s-2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \frac{(n_{is}-s-l_k)!}{(n_{is}+j_s-n-l_k-j_{sa}^{ik})! \cdot (n+j_{sa}^{ik}-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-l)!}{(D+j^{sa}+s-n-l_{ik}-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$\left( (D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_{ik} \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$\left. (D \geq n < n \wedge l = l_i \wedge l_s = D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$\left. D + j_{sa} - l_{ik} \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \right) \wedge$$

$$l_{ik} \wedge l_i = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^l, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_s - l_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
&\frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
&\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{is} + j_s - n - l_{sa} - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(l_s - l_{sa} - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s = \dots)}^{l_s + j_s - l} \sum_{j_{sa} = l_i + n + j_{sa} - s}^{n} \frac{(n_i - j_s - n_{is} + j_s - j_{sa} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{n} \frac{(n_i - j_s + 1) \cdot (n_{is} + j_s - j_{sa})!}{n_i = n \sum_{(n_{is} = n - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_s} \sum_{i=1}^{j_s - j_{sa} - l_s + k} \sum_{l_i=1}^{l_s + j_{sa} - l - j_s + k} \sum_{j_s^s = D - s}^{n_{is} - j_s + 1}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_{is} - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}$$

$$\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n - 1 \neq l_s \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - l_s \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{z^j}^{OST} = \sum_{l=1}^{j^{sa}-j_{sa}+1} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\ \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(n - l_s - j_s + 1)!}{(n - l_s - j_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa})! \cdot (l_{sa} - s)!}{(D + j_{sa} + j_{sa} - l)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
& \sum_{n_{ik}=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
& \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_s \leq j_{sa} - 1 \wedge$$

$$s \cdot \{j_{sa}^s, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i+j_{sa}-s+1)} \sum_{(n_i=n+k)}^{(n_i+j_s-j^{sa})} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j^{sa})} j^{sa+1} \cdot \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - i - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i+j_{sa}-s+1)} \sum_{(n_i=n+k)}^{(n_i+j_s-j^{sa})} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j^{sa})} j^{sa+1}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\cdot)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa}^{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} + l_{sa} - s)!}{(j_s + l_{sa} - j^{sa} - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - s)! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{D, s} = \left( \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )} \sum_{j^{sa}=j_{sa}} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left( \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-i^{l+1}} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=i}^n \sum_{j_s=1}^{(n_{sa}-j^{sa}+1)} \sum_{j_{sa}=j_{sa}}^{(n_{sa}-j^{sa}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{n_{ik}=n_i+j_{sa}-j_{sa}+1}^{(n_{sa}-j_{sa}+1)} \sum_{n_s=n_{ik}+j_{sa}-j_{sa}-k}^{(n_{sa}-j_{sa}+1)}$$

$$\frac{(n_{sa} + j_s - l_s - k - j_{sa})!}{(n_{sa} + j_s - l_s - k - j_{sa})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l = i \wedge l_s \leq D$   
 $1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$   
 $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - 1$   
 $l_{ik} - k + 1 = l_s + j_{sa} - j_{sa} + j_{sa} - j_{sa} = l_s + j_{sa} - s > l_{sa} \wedge$   
 $l_i \geq D + s - 1$   
 $D \geq n < n \wedge l = k = 0 \wedge$   
 $j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_s - 1 \wedge$   
 $s: \{j_s^s, j_{sa}, \dots\}$   
 $s \geq 3 \wedge s = s \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=i}^n \sum_{j_s=1}^{(n_{sa}-j^{sa}+1)} \sum_{j_{sa}=j_{sa}}^{(n_{sa}-j^{sa}+1)}$$

$$\sum_{n_i=n}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - \dots)}$$

$$\sum_{k=0}^n \sum_{i=0}^k \sum_{j=0}^i \binom{(\dots)}{j_s = \dots, j_{sa} = j_{sa}} \binom{(\dots)}{n_{ik} = n_i + j_s - j_{sa} - j_{sa}^{ik} + 1} \binom{(\dots)}{n_{ik} + j_{sa}^{ik} - j_{sa} - k} \frac{(D + j_s - \dots)!}{(\dots)! \cdot (n - s)!} \frac{(D - l_i)!}{(\dots)! \cdot (n - s)!}$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} >$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - s \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, j_{sa}^i\} \wedge$$

$$s > j_{sa} = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=i} \sum_{(j_s=1)}^{l_{sa}-i+1} \sum_{j_{sa}=j_{sa}}^{(n_i-j_{sa}+1)} \\ \sum_{n_i=n}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - l_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!} \cdot \sum_{i=l}^{n} \sum_{(j_s=1)}^{j^{sa}} \dots$$

$$\sum_{k=0}^n (n_{ik} = j_{sa} - j^{sa} - k + 1) n_{sa} = n_{ik} + j_{sa} - k$$

$$\frac{(n_i + j_s - n - k - j_{sa})! \cdot (n - s)!}{(D - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1$   
 $2 \leq l \leq D + l_s - n - l_{sa} \wedge$   
 $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$   
 $j_s + j_{sa} \leq j^{sa} \leq j_s + j_{sa} - 1$   
 $l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge$   
 $D \geq n < n - l = k \geq 1$   
 $j_{sa} - j_s - 1 \wedge j_{sa} = j_{sa} - 1 \wedge$   
 $s: \{j_{sa}^s, k, j_s^i, \dots, j_{sa}^i\} \wedge$   
 $j_{sa} = s + k \wedge$   
 $k_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^i+1} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
& \left( \sum_{k=l}^{(j^{sa}-j_s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_s)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}
\end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{\mathbb{k}=0}^{l_{sa}+j_{sa}-1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{ik} - l_{sa}^{ik} + 2)} \sum_{j_{sa} = l_s + n - D - j_{sa}^{ik} + 1}^{(l_{ik} - l_{sa}^{ik} + 2)} \sum_{j_{sa} = l_s + n - D}^{(l_{ik} - l_{sa}^{ik} + 2)} \sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_s - j_{sa} - k)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - n_{is} - 1)!}{(n_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{( )} \sum_{j_{sa} = j_{sa}^{ik} - j_{sa} + 1}^{( )} \sum_{j_{sa} = l_s + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)}$$

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\cdot)} (n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j_{sa}^s=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$



$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{l_{sa} - l + 1} j^{sa} = l_{sa} + n - k \right. \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{l_{sa} - l + 1} j^{sa} = j_s + j_{sa} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
\end{aligned}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D + s + 1)}^{j_{sa} = j_{sa} - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i = n + \mathbb{k})} \sum_{(n_{ik} = n + j_{sa}^s - j_{sa} - j_s + 1)}^{(n_{ik} = n + j_{sa}^{ik} - j_{sa} - \mathbb{k})} \frac{(n_{is} + s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + j_s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l > D - j_s + 1 \wedge$

$2 \leq l \leq D + l_s + j_s - n - 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$j_s + j_{sa} \leq j_s \leq n + j_s - s \wedge$

$l_i + j_{sa} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
f_{zS}^{DOST} = & \left( \sum_{k=l}^{(j_s)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_s+j_{sa}-l)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}-lk} \right. \\
& \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-lk} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(j^{sa}-j)} \sum_{(j_s=l_s+n-D)}^{(l_s+j_{sa}-l)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}-lk} \right. \\
& \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-lk} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right) + \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-1}^{(n_{is}-n_{sa}-1)!} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{is} - 1)!}{(n_{is} + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n - l_s - j_s + 1)!}{(n + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j^{sa} - l - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{D, ST} = \sum_{k=l}^n \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \frac{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j^{sa}-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} \sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\cdot)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-1)! \cdot (l_s-2)!} \cdot \frac{(D-l_i)}{(D+j^{sa}+s-n-l-j_{sa})! \cdot (n_{is}-j_{sa}-j_{sa}^{sa})!}}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^{sa}, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-j_{sa}^{ik+1}} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-j_{sa}^{ik+1}} \right) \\
 & \sum_{n_i=n+l_k-j_s+1}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik+1}} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - 1)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik} \mid n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}^{( )} \frac{(n_{is} - s - k)!}{(n_{is} + n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j_s - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$



$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{zj_{sa}^{ST}} = \left( \sum_{k=l}^{(\cdot)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-l_k}}$$

$$\frac{(n_{is} - s - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l_{sa})!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^S_{j_s, j_{sa}^{DOST}} = \sum_{l_s=l_s+n}^{l_s+l-1} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}+n-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_i-j_s} \sum_{n_{sa}=n-j_{sa}+1}^{n_i-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(n_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_Z: z = 1 \Rightarrow$ 

$$\begin{aligned}
f_Z \mathcal{S}_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \left. \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right)
\end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s - l + 1)} \sum_{j^{sa} = j_s + j_{sa}}^{l_{sa} - l + 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{is} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
& \frac{(j_s - l - 1)!}{(j_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - l + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(i-j_s+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-l+1}$$



$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{()}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n_{is} + j_s - n - l - j_{sa} - 1)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge n_{ik} + j_{sa} - s > 0 \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1$$

$$s: \{j_{sa}^s, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = n + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j^{sa}}^{DOST}} = \sum_{k=l}^{() } \sum_{(j_s=j^{sa}-j_{sa}+1)}^{() } \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^n \sum_{\substack{(\cdot) \\ (j_s = j^{sa} - j_{sa} + 1) \\ j^{sa} = l_i + n_{ik} - D - s}} \frac{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}{n_{is} = n_{is} + k - j_s + 1} \cdot \frac{(n_{is} - s - k)!}{(n_{is} + j_{sa} - n - k - j_s)! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge D - l_i - j_{sa} + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n_{is} - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s \in \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_s+n+j_{sa}-D-1}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
&\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - j^{sa} - l_s - s)!}{(D + j^{sa} - n - l_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
&\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \\
&\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-j_{sa}+1)}^{(n-j_s+1)} \sum_{j_{sa}=j_s-1}^{(n_{is}+j_s-j_{sa}^s-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j_{sa}^s-1)}$$

$$\frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}^s)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa}^s)!}$$

$$\frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(n-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(n_{is}+j_s-j_{sa}^s-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+j_s-j_{sa}^s-1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{is}-s-k)!}{(n_{is}+j_s-n-k-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{POST} = \sum_{k=l}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_s = j_s + j_{sa} - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{(\quad)} \frac{(n_{is}-s-l_k) \cdot (n+j_{sa}-j_s)! \cdot (l_s-l-1)! \cdot (j_s-l+1)! \cdot (j_s-2)! \cdot (D-l)!}{(D+j^{sa}+s-n-l_k-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = j_s - 1 \geq 0 \wedge$

$j_s \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$

$s: \{l, l_k, j_{sa}, \dots, j_{sa}^i\}$

$l \geq 3 \wedge l = s + l_k \wedge$

$l_{k_z}: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_s-l+1} \sum_{j_s=l_i+n_{ik}+j_{sa}+1}^{j_s+l_i+n_{ik}+j_{sa}+1} \sum_{j_{sa}=j_s+j_{sa}+1}^{j_{sa}+j_s+l_i+n_{ik}+j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n_{is}+j_{sa}+1}^{n_{ik}+j_{sa}+1} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k}^{n_{sa}+j_{sa}+1} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k}^{n_{sa}+j_{sa}+1}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}+1}^{n_{ik}+j_{sa}+1} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k}^{n_{sa}+j_{sa}+1}$$

$$\frac{(n_{is} - n_{sa} - l_k)!}{(n_{is} - n_{sa} - l_k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge l_s > D - n + 1$$

$$j_s \leq j_s - j_{sa} + 1$$

$$j_s + j_s - 1 \leq j_s + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - l - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-k}}^{(n_{is}-s-k)}$$

$$\frac{(n_{is} + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(l_s - l_{sa} - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_s \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{s} = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^{s-1}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z^{S_{j_s, j^{sa}DOST}} = \sum_{k=l} \sum_{\binom{()}{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l-s+1} j^{sa}=j_s+j_{sa}-1$$

$$\sum_{i=1}^n \sum_{j_s=i-j_s+1}^{i-j_s+1} \sum_{n_{sa}=n+l_k-j_s+1}^{n_{is}+j_s-j^{sa}-l_k} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

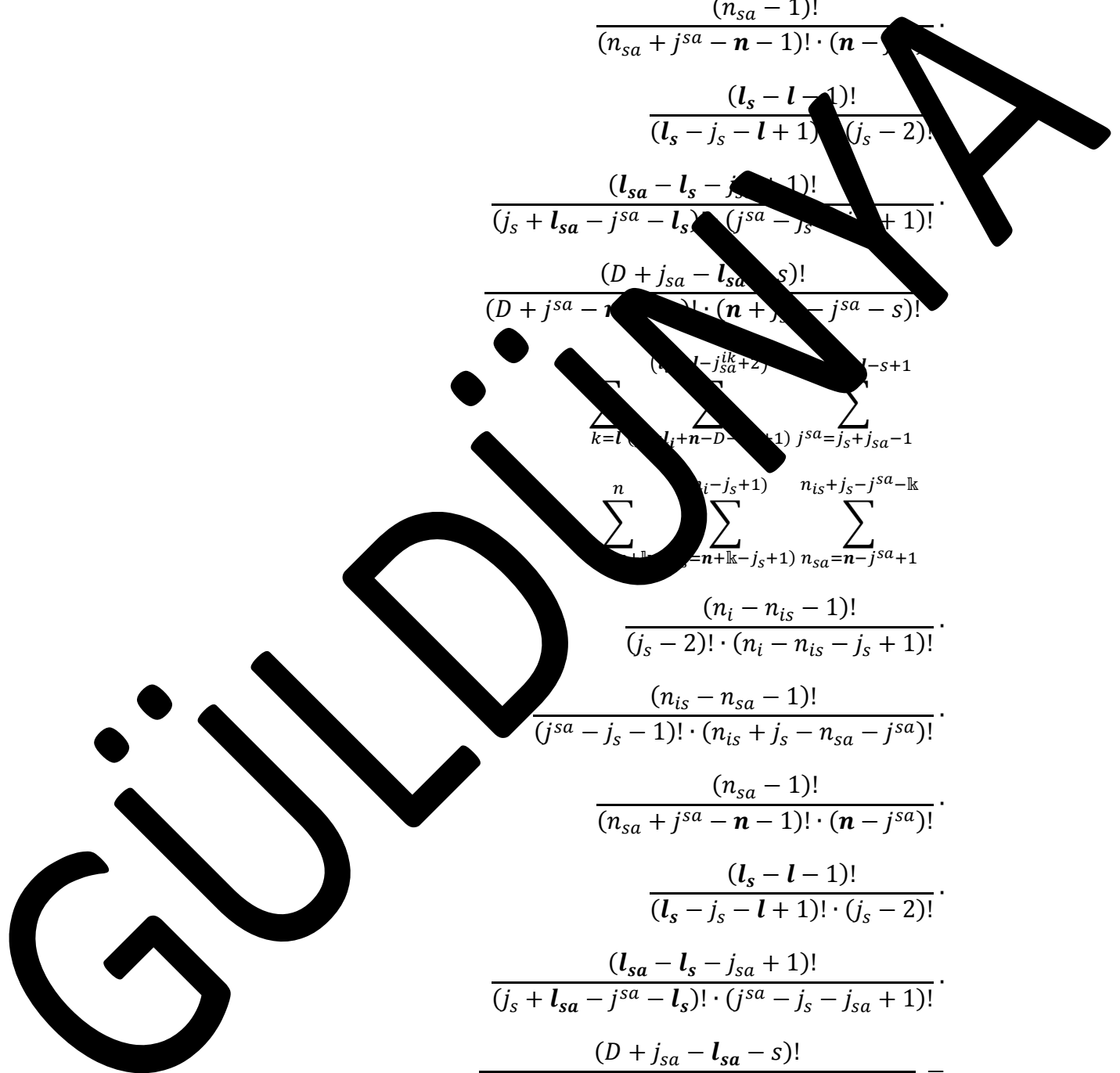
$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n_{is} - j_{sa} - j_{sa}^s - 1)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge n_{ik} + j_{sa} - s = n_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = n + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s - l + 1) - (j_s - j_s - l + 1) - (j_s - 2) - (j_s + l_{sa} - j^{sa} - l_s) - (D + j_{sa} - l_{sa} - s)}$$

$$\sum_{n_i = n + lk}^{(n_i - j_s + 1) - (n_{is} + j_s - j^{sa} - lk) - (j_s - 2) - (n_i - n_{is} - j_s + 1) - (j^{sa} - j_s - j_{sa} + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + lk}^n \sum_{(n_{is} = n + lk - j_s + 1)}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$DOST_{j_s, j_{sa}} = \sum_{k=l} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^s+1}^{n_{is}+j_s-j_{sa}^s-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa}^s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^s - n - 1)! \cdot (n - j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_{is}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-l_k}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_s\} \wedge$$

$$s \geq 3 \wedge s = j_s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa} - j_{sa} + 1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_{sa} - l + j_{sa}^{ik} - 1)} \sum_{(n_{is} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)}^{(n_{is} + j_s - j^{sa} - l_k)} \\
 & \sum_{n+l_k}^{(n_{is} + l_k - j_s + 1)} \sum_{(n_{sa} - j^{sa} + 1)}^{(j^{sa} + 1)} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(j^{sa})! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk)}^{( )}$$

$$\frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{lk} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \dots \geq 0 \wedge$$

$$j_s \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 3 \wedge s = s + lk \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_{sa}^{DOST}}} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-j_s-1)}^{(j_s=l_i+n-D-j_s-1)} \sum_{(j_s=l_i+n-D-j_s-1)}^{(j_s=l_i+n-D-j_s-1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(j_s=l_i+n-D-s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$D \geq n < n \wedge \mathbb{k} \geq 1 \wedge$$

$$j_s \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq s \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_{sa}-j_{sa}+1)} \sum_{l_s+j_{sa}-l}^{j_{sa}=l_i+n+j_{sa}-D-s}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{l_s-l+1} \sum_{l_s+n-D}^{l_s+l-1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{is} - s - \dots)}{(n_{is} + j_s - n - k - j_{sa}^{s})! \cdot (n + j_{sa} - j_s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$(D - l - 1)!$$

$$\frac{(D + j^{sa} + s - n - l_i - j_{sa})!}{(n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + l_{sa} - l - j_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^n \sum_{(n_{i+1}=n+j_s+1)}^{(n_{i+1}=j_s+1)}$$

$$\sum_{n_{ik}=n}^{(n_{ik}=n+j_s+1)} \sum_{(n_{sa}=n+j_s+1)}^{(n_{sa}=n+j_s+1)} \sum_{(n_{sa}=n+j_s+1)}^{(n_{sa}=n+j_s+1)}$$

$$\frac{(n_{is} - l_s - k)!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_s-l+1} \sum_{j^{sa}=l_s+l+1}^{l_s-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{i_{sa}-k}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - 1)! \cdot (n_{sa} + 1)!}$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + l_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + 1 - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{(j_s=l_s+n-D-j_{sa})}^{(l_{sa}-D-j_{sa})} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j_s-j_{sa}-\mathbb{k})} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(n_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \sum_{k=0}^{l_i - l + 1} \sum_{i=l_i + n - k}^{n - k} \sum_{j_{sa}=j_s + j_{sa} - 1}^n \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik} - j_{sa} - k)} \frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)} \sum_{j_s=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \\ \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=j_{sa}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \\ \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \left. \right)$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa}^{ik} + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - j_{sa}^{ik} + 2}$$

$$\sum_{n_i = n + k - j_s}^{(n - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{is} = n + k - j_s)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa} - j_{sa}^{ik}} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zj} S_{j_{sa}}^{ST} = \left( \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - n - \mathbb{k} + 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - \mathbb{k} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\left( \frac{(D + j_{sa} - j^{sa} - s)!}{(D + j_{sa} - n - \mathbb{k} + 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_{sa}}^{ST} = \left( \sum_{k=l} \sum_{(j_s=j)} \sum_{(j_{sa}=j)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j^{sa}-k} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l} \sum_{(j_s=2)} \sum_{j^{sa}=l_{sa}+n-D}^{(j^{sa}-j_{sa}) l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=0}^{(l_{ik}-l-1)+2} \sum_{(j_s)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{sa}-j_{sa}^{ik})}$$

$$\frac{(n_{is}-s-n_{ik})!}{(n_{is}+j_s-n-l_k-j_{sa}^{ik})! \cdot (n+j_{sa}^{ik}-j_s)!}$$

$$\frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!}$$

$$(D-l-1)!$$

$$\frac{(D-l-1)!}{(D+j^{sa}+s-n-l_k-j_{sa}^{ik})! \cdot (n+j_{sa}^{ik}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l_s - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge$$

$$D - j_{sa} - n - j_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_s \leq j_{sa} - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, l_k, j_{sa}, i\}$$

$$s \leq 3 \wedge j_s = s + l_k \wedge$$

$$l_k: z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j_{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(l_s-l-j_{sa}^{ik}+2)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-D-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 1)} \sum_{(j_s = n - D - j_{sa} + 1)}^{(n - D - j_{sa} + 1)} \sum_{(i_s = n - j_{sa} + 1)}^{(n - j_{sa} + 1)} \sum_{n_i = n + k}^{(n_i = n + k)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{sa} = n - j_{sa} + 1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s = 2)}^{(l_{sa} - l + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{(l_{sa} - l + 1)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{is} + j_s - j_{sa} - k)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_s+2)} \sum_{n_i=n+k}^{(n_i+n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{l_{sa}-l+1} \frac{(n_i - n_{is} - 1)!}{(i - j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_s^{ik}+2)} \sum_{j_s=l_i+n-D-s+1}^{(n_i+n-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_s \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 3 \wedge s = j_{sa} + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \left( \sum_{k=l}^n \sum_{(j_s=j_{sa}-j_{sa}+1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \frac{l_s+j_{sa}-l}{(n_i-n_{is}-1)!} \cdot \frac{(n_i-j_s+1)}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{n_{is}+j_s-j_{sa}-\mathbb{k}}{(n_{is}-n_{sa}-1)!} \cdot \frac{(n_{is}+j_s-n_{sa}-j_{sa})!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_s+j_s-l} \frac{\Delta_{j^{sa}=l_{ik}+n+j_s, D-j_{sa}^{ik}}}{\Delta_{n_{is}=n+l_{ik}-j_s, n_{sa}=n-j^{sa}+1}} \right) \\
 & \sum_{n_i=n+l_{ik}}^n \frac{(n_i - j_s + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_{ik}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{\substack{() \\ l_s+j_{sa} \\ n_{sa}=l_i+n+j_{sa}-j^{sa}}} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s^{sa} - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i, l \leq D - n + 1 \wedge$$

$$D + l_s + j_s - n - l_{sa} - 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j^{sa} - j_{sa} - 1$$

$$j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$$

$$i - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_s}^{n} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{n_i-j_{sa}-\mathbb{k}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}+1)}^{(n_{sa}-n_{is}-1)!} \frac{(j_s-2)! \cdot (n_{is}-j_s+1)!}{(j_s-1)! \cdot (n_{is}+j_s-j_{sa})!} \frac{(n_{is}-1)!}{(n_{sa}-j_{sa}-n-1)! \cdot (n-j_{sa})!} \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j_{sa}-l_s)! \cdot (j_{sa}-j_s-j_{sa}+1)!} \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{n} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa})! \cdot (n+j_{sa}^s-s-j_s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(l_k+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}^{l_k+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_k+n+j_{sa}-D-j_{sa}^{ik}} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!} \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
& \frac{(D + j_s - l_{sa} - s)!}{(D + j_s - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_k+n-D-j_{sa}^{ik}+1)}^{l_k+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + l_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D - n - j_s) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} = D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=1}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j_{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa})! \cdot l_{sa} - s)!}{(D + j_{sa} + j_{sa} - l)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^n \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_i-j_s+1)} \\
 & \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_{sa}$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq (D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} - j_s - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \leq j_{sa} - s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$



$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{i=l}^{(l_s-l+1)} \sum_{j_s=2}^{j_s} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_{sa} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = l \geq 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, j_{sa}^i\} \wedge$$

$$s > n \wedge s = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \right)$$

$$\sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} + \left( \sum_{k=1}^{l_s - j_{sa}} \sum_{l=j_{sa}+2}^{l_s + j_{sa} - k} \frac{(n_i - j_s + 1)!}{(n_i - n + k - j_s + 1)!} \cdot \frac{(n_{is} + j_s - j^{sa} - k)!}{(n_{is} + j_s - j^{sa} - k)!} \cdot \frac{(n_{sa} - j^{sa} + 1)!}{(n_{sa} - n - j^{sa} + 1)!} \right) \cdot \frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - k}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{l=1}^{(j_s)} \sum_{j_s=j_s+l}^{(j_s)} \sum_{j^{sa}=j_s+l}^{(j_s+l)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-l_k)}^{(j_s)} \\
& \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq n < n) \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 - j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge$$

$$j_s \leq j_{sa} - j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 3, k = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\left( \sum_{k=l}^{l+1} \sum_{j_s=2}^{l_s-l+1} \sum_{j^{sa}=j_s}^{j_s+l-1} \right)$$

$$\sum_{n_i=n+k}^{n_i-j_s+1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j^{sa}-k} \sum_{j^{sa}=j_s}^{j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_s-l+1} \sum_{j_s=2}^{l_s-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s+l-1}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^S_{j_s, j^{sa}} = \left( \sum_{k=l}^{j^{sa}-j_{sa}} \sum_{j_{sa}=l_{sa}+n-D}^{j^{sa}-l} \sum_{n_i=n}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_i+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right)$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - j_{sa} - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{l_s+j_{sa}-l}^{( )} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-k)}^{( )}$$

$$\frac{(n_{is} - s - \dots)}{(n_{is} + j_s - n - k - j_{sa}^{s})! \cdot (n + j_{sa} - j_s)!}$$

$$(j_s - l - 1)!$$

$$(j_s - l + 1)! \cdot (j_s - 2)!$$

$$(D - l)!$$

$$\frac{(D + j^{sa} + s - n - l_i - j_{sa})!}{(n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1) \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - k + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} >$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - k + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=} \sum_{(n_{sa}=j_s^{ik}-j_{sa}-k)}^{(j_s^{ik}-j_{sa}-k)}$$

$$\frac{(n_{is} - k)!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_s^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - i)!}{(D + j^{sa} - n - i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + l_{sa} - n < l_{sa} + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = j_{sa} + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \right. \\ \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{j^{sa}=n-D}^{(n_{sa}-n+D-j_{sa})} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{(l_{sa}-l+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s = l_i + n - k + 1}^{(n - j_s + 1)} \sum_{n_i = n + k}^n \sum_{n_{is} = n_{is} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s}^{(n_{is} - j_s + 1)} \sum_{j_{sa} = n_{ik} + j_{sa} - j_{sa} - k}^{(n_{is} - j_s + 1)} \frac{(n_{is} - k - j_{sa})!}{(n_{is} - k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i, l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1$$

$$j_s + 1 \leq j_s - n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_{ik} \leq D - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \frac{(n_{is} - n_s - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - 1)! \cdot l_{sa} - s)!}{(D + j_s - 1 - j^{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

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$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$



$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz_{j_{sa}}^{POST} = \sum_{k=l}^{( )} \sum_{j_s=j_{sa}-j_{sa}+1}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{( )} \sum_{j_s=j_{sa}-j_{sa}+1}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-l+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk)}^{(\cdot)} \frac{(n_{is}-s-lk)!}{(n_{is}+j_s-n-lk-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}}{1}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$lk: z = 1 =$$

$$f_{zS}^{DOST}_{j_s, j_{sa}^s} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{sa}^s-j_{sa}+1)}^{(\cdot)} \sum_{j_{sa}^s=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^s+1}^{n_{is}+j_s-j_{sa}^s-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa}^s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^s - n - 1)! \cdot (n - j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{)}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+1}^n \sum_{n_{ik}=n+1}^{n_{sa}=n+1} \frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - j_s + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$j_s + s - 1 < l_i \leq D + j_s + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l_s \leq D - j_s \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$j_{sa} \in \{j_{sa}^s, \mathbb{k}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-k}^{n_{is}+j_s-j^{sa}-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{is} - 1)!}{(n_i + j^{sa} - n_{is} - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \\
 &\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(n_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} (n_{is}=n+k-j_s+1)$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk)}^{(\cdot)}$$

$$\frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$lk: z = 1 =$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s + j_{sa} - 1}^{(n - j_s + 1)} \sum_{n_i=n+1}^n \sum_{n_{ik}=n - j_{sa}^{ik} - l_{sa} - l_{ik}}^{(n_{sa}=n - j_{sa}^{ik} - j_{sa} - l_{ik})} \frac{(n_{is} - l_{ik})!}{(n_{is} + j_s - n - l_{ik} - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - 1 + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge n + j_{sa}^{ik} - l_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$n + j_{sa} - 1 < l_{sa} \leq D \wedge l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - 1 + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\{j_{sa}^s, l_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + l_{sa} \wedge$$

$$l_{sa}^z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}-l_k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{n_{is}+j_s-j^{sa}-l_k} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-l_k}}^{(n_{sa}-s-l_k)}$$

$$\frac{(n_{is} - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l_k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq n - 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{sa} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq l_{sa} < n \wedge l = l_k \geq l_s \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = j_{sa}^i + l_k \wedge$$

$$l_{sa} \geq l_{sa} \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_s=2}}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=0}^{(l_{ik}-l-1)+2} \sum_{(j_s)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l)} l_{ik+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-D}^{(n)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{is}-s-k)!}{(n_{is}+j_s-n-k-j_{sa})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-k)!}{(D+j^{sa}+s-n-k-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_s - n < l_{sa} \wedge D + l_s + j_{sa} - n - 1$$

$$D + n < n \wedge k = k \geq 0$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s \leq j_s - 1$$

$$s \in \{j_{sa}^s, l_{sa}^s, \dots, j_{sa}^s\} \wedge$$

$$s \geq 3 \wedge s = j_s - k \wedge$$

$$k_{s-2} = 1$$

$$fz_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_i+n-D-s)} l_{i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(n)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^n \sum_{j_s=l_i+n-D-s+1}^{i-j_s+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{is}-s-l_k)!}{(n_{is}+j_s-n-l_k-j_{sa}^s)! \cdot (n+j_s^s-s-j_s)!}$$

$$\frac{(l_s-l-j_s+1)! \cdot (l_s-l-j_s-2)!}{(l_s-j_s-l+1)! \cdot (l_s-l-j_s-2)!}$$

$$\frac{(D-l_i)}{(D+j_{sa}^s+s-n-l-j_{sa}^s)! \cdot (n_{is}+j_s-j_{sa}^s-l)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} + j_{sa}^{ik} - n - l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, l_k, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + l_k$$

$$l_{kz}: z = \dots \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{i=0}^{l_s - l} \sum_{k=0}^{j_s - i} \sum_{l_{ik} + j_{sa} - l - j_{sa}^{ik}}^{j_s - i - k} \sum_{j_s - i - k}^{j_s - i - k} \sum_{i_{sa} - l + 1}^{i_{sa} - l + 1} \sum_{i_s + 1}^{i_s + 1} \sum_{n_{is} + j_s - j^{sa} - k}^{n_{is} + j_s - j^{sa} - k} \sum_{n_i = n + k}^{n_i = n + k} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - i - k)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - i - k)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{j_s = j^{sa} - j_{sa} + 1}^{( )} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk}^{(\cdot)}$$

$$\frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$lk : z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}^{sa}-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_{is}+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-l_k}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge$$

$$j_s \leq j_{sa} - j_{sa} = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 3, j_{sa} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{i=0}^{l_{sa}-l+1} \sum_{n_i=n+l_k}^{(n_i+l_k-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}+j_s-j^{sa}-l_k)} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D > n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{\mathbb{k}} \sum_{(j_s=2)}^{l-j_{sa}+2} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\sum_{k=l}^{(l-s-n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} S_{j_s, j_{sa}}^{D, l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} j_{sa}^{sa=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}}^{n_{is}+j_s-j_{sa}^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j_{sa} + 1)!} \cdot \\
 & \frac{(n - n_{is} - j_{sa} - 1)!}{(n + j_{sa} - n_{is} - 1)! \cdot (n - j_{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l+1)} j_{sa}^{sa=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{-l_k})} \\
 & \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, k, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s - l)} \sum_{(j_s - 2)}^{l_s + j_{sa} - s + 1} \sum_{j^{sa} = l_s + j_{sa} - k}^{j^{sa} - 1} \cdot \\
 & \sum_{n_i = n + k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{n_{is} + j_s - j^{sa} - k} \sum_{j^{sa} + 1}^{j^{sa} + 1} \cdot \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \cdot \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$ 

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
&\frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + j_s - j^{sa} - l)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
&\frac{(n_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
\end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=l_{sa}+n-1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n}^{(\quad)} \sum_{(n_{sa}=n+j_{sa}^{ik}-j_{sa}-k)}^{(\quad)}$$

$$\frac{(n_{is} + j_s - n - k - j_{sa})!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_s)!}{(D + j^{sa} - n - l - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOS} = \sum_{j_s=1}^{j_s^i} \sum_{j_s^s=1}^{j_s^s} \dots \sum_{j_s^i=1}^{j_s^i} \frac{(l_i + j_{sa} - l - s + 1)}{j^{sa} = l_i + n + j_{sa} - D - s} \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-l-s+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{i=1}^{l-1} \sum_{(j_{sa}=n-D-s+1)}^{l-i} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+l_k}^{(n_{is}-j_s+1)}$$

$$\frac{(n_{is}-j_s+1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!} \cdot \frac{(n_{is} - j_s - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$\left( (D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s j_{sa}}^{DOST} = \left( \sum_{k=i}^{\binom{()}{j_s}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s}} \sum_{n_i=j_{sa}-\mathbb{k}+1}^{\binom{()}{j_s}} \frac{(n_i - n_{sa} - 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left( \sum_{k=i}^{\binom{()}{j_s}} \sum_{j_{sa}=j_{sa}+1}^{\binom{()}{j_s}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{j_s}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{()}{j_s}} \frac{(n_i - n_{sa} - 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=i}^{\binom{()}{j_s}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{\binom{()}{j_s=1}} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{sa}=n-j^{sa}+1}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_s=1)}^{\binom{()}{j_{sa}=j_{sa}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}-j_{sa}^{ik}+1)}^{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}}}$$

$$\frac{(n_i + j_s - s - k - j_{sa}^s)!}{(n_i + j_s - n - k - j_{sa}^s)! (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! (n - s)!}$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - \mathbb{k} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k} \cdot z = 1 \wedge$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=i}^{\binom{l_{sa}-i+1}{j_s=1}} \sum_{j_{sa}=j_{sa}}^{\binom{n}{n_i-j_{sa}-\mathbb{k}+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n_i-n_{sa}-1}{(j_{sa}-2)! \cdot (n_i-n_{sa}-j_{sa}+1)!}} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(l_{sa}-j_{sa}-l_s+1)! \cdot (j_{sa}-j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{\binom{()}{j_s=1}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}-j_{sa}-k}$$

$$\frac{(n_i + j_s - s - k - j)!}{(n_i + j_s - n - k - j)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$

$s \in \{j_{sa}^s, \dots, k, \dots, j_{sa}^s\} \wedge S: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}\} \wedge$

$s \geq 4 \wedge s = s + k$

$k_z: z = \dots \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa})+j_{sa}-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-j_s+1}^{(j^{sa}-j_{sa})+j_{sa}-j_{sa}^{ik}+1} \right)$$

$$\sum_{n+l_k}^{(n_{is}+l_k-j_s+1)} \sum_{(n_{is}+l_k-j_s+1)}^{(n_{is}+j_s-j^{sa}-k)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa} - 1)!} \cdot \sum_{k=l}^{(n_{is} - n_{sa} - \mathbb{k} - 1)} \sum_{j_s = j_s + l - j_{sa} + 1}^{(n_{is} - n_{sa} - \mathbb{k} - 1)} \sum_{j_{sa} = j_{sa} - D - s}^{(n_{is} - n_{sa} - \mathbb{k} - 1)} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})} \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa})! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge D - n + 1 \wedge$$

$$D - l_s + j_s - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$



$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j_{sa}=l_{sa}+n-}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s-j_{sa}-\mathbb{k})} \frac{(n_{is}-n_{sa}-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-1-\mathbb{k})!} \cdot \frac{(n_{is}-1)!}{(n_{sa}-n_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j_{sa}-l_s)! \cdot (j_{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOSI} \left( \sum_{k=l}^{l-j_{sa}^{ik}+2} \sum_{j_s=l_{sa}+n-D-j_{sa}+1}^{j_s=l_{sa}+n-D-j_{sa}+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{sa}-l+1} j^{sa}=l_{sa}+n-D \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} j^{sa}=j_s+j_{sa} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa} - \mathbb{k}} \sum_{(n_{sa} = n_{ik} + j_{sa} - \mathbb{k})}^{(n_{is} - s - \mathbb{k})}$$

$$\frac{(n_{is} + j_s - n - j_{sa} - \mathbb{k})!}{(n + j_{sa} - s - j_s)!}$$

$$\frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + \mathbb{k} \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - \mathbb{k} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_s \wedge$$

$$j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s + l_{sa} + j_s - j_s - l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 2 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{l_s + j_{sa} - l} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (n_{is} - j_s - j_{sa} + 1)!} \cdot \\
& \left( \frac{(n + j_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n_{sa} - j^{sa} - s)!} \right) \cdot \\
& \sum_{(i=j_{sa}+1)}^{(n_i-j_s+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

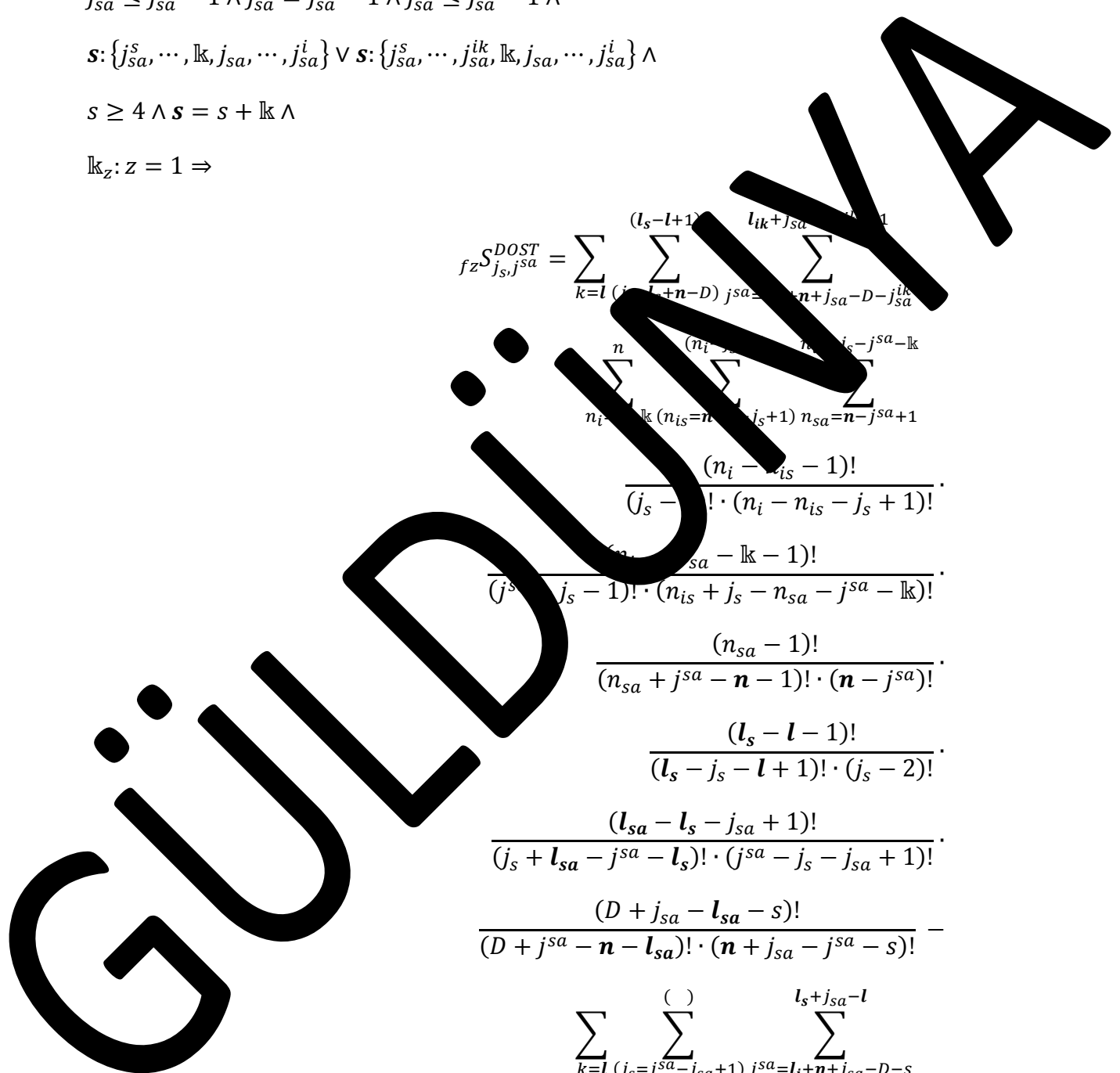
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s+l+n-D) j_{sa} \leq n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}} \sum_{n_i \geq k}^n \sum_{(n_{is}=n_{is}+j_s+1) n_{sa}=n-j_{sa}+1}^{(n_i-j_{sa}-k)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{( )} \sum_{(j_s=j_{sa}-j_{sa}+1) j_{sa}=l_i+n+j_{sa}-D-s}^{( )} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(l_s+j_{sa}-l)}$$



$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(\cdot)} (n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_s \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^i + 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 1 =$$

$$f_Z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$



$$\begin{aligned}
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_{ik}+n-D)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \right. \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}-j^{sa}-k)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_s+j_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-k)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}
\end{aligned}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - s)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s=l_i+n-k}^{(n - j_s + 1)} \sum_{n_i=n+lk}^n \sum_{(n_{is} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_s^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik} - j_{sa} - lk)} \frac{(n_{is} - s - lk)!}{(n_{is} + j_s^{ik} - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} \wedge \\ & j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & (n_{ik} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} \wedge \end{aligned}$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{\sum_{j_s=j^{sa}-j_{sa}+1}^{( )} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}}{\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

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$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{is}=n+l_k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-l_k}}$$

$$\frac{(n_{is} - s - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l_{sa})!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^S_{j_s, j_{sa}}^{DOST} = \sum_{l_s=l_s+n}^{l_s+l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_s-n_{is}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-\mathbf{n}-\mathbb{k}-j_{sa}^s)! \cdot (\mathbf{n}+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-\mathbf{n}-l_i-j_{sa})! \cdot (\mathbf{n}+j_{sa}-j_{sa}-s)!}$$

$$((D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq \mathbf{n} < n \wedge l_s > D - \mathbf{n} + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - \mathbf{n} - l_{sa} \wedge$$

$$2 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$ 

$$\begin{aligned}
f_z \mathcal{S}_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \left. \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
& \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right)
\end{aligned}$$



$$\begin{aligned}
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j^{sa}}^{n_{is}+j_s-j^s} \\
 & \frac{(n_i - n_{is} - \mathbb{k})!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - \mathbb{k} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!} \cdot (j_s - 2)! \\
 & \frac{(l_{sa} - j_{sa} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜŞMÜŞA

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s-j_s+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\ &\sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-l+1} \end{aligned}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_s-s-j_s)!}$$

$$\frac{(l_s-l-j_s+1)!}{(l_s-j_s-1)! \cdot (l_s-2)!}$$

$$\frac{(D-l_i)}{(D+j_{sa}+s-n-l-j_{sa})! \cdot (n_{is}+j_s-j_{sa}-l)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - l_{sa})!} \cdot \sum_{k=l}^{\binom{D}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+l-k}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+l-k-j_s+1}^n \sum_{n_{is}=n+l-k-j_s+1}^{n+l-k-j_s+1} \sum_{n_{is}+j_{sa}-j_{sa}^s}^{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k} \frac{(n_{is} - s - l_k)!}{(n_{is} + j_{sa} - n - l_k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge I = \mathbb{k} > 0 \wedge I = \mathbb{k} > 0 + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + j_{sa} - l_s \wedge l_{ik} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D > n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_s+n+j_{sa}-D-1}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - k)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
&\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - j^{sa} - l_s - s)!}{(D + j^{sa} - n - l_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
&\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
&\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \\
&\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

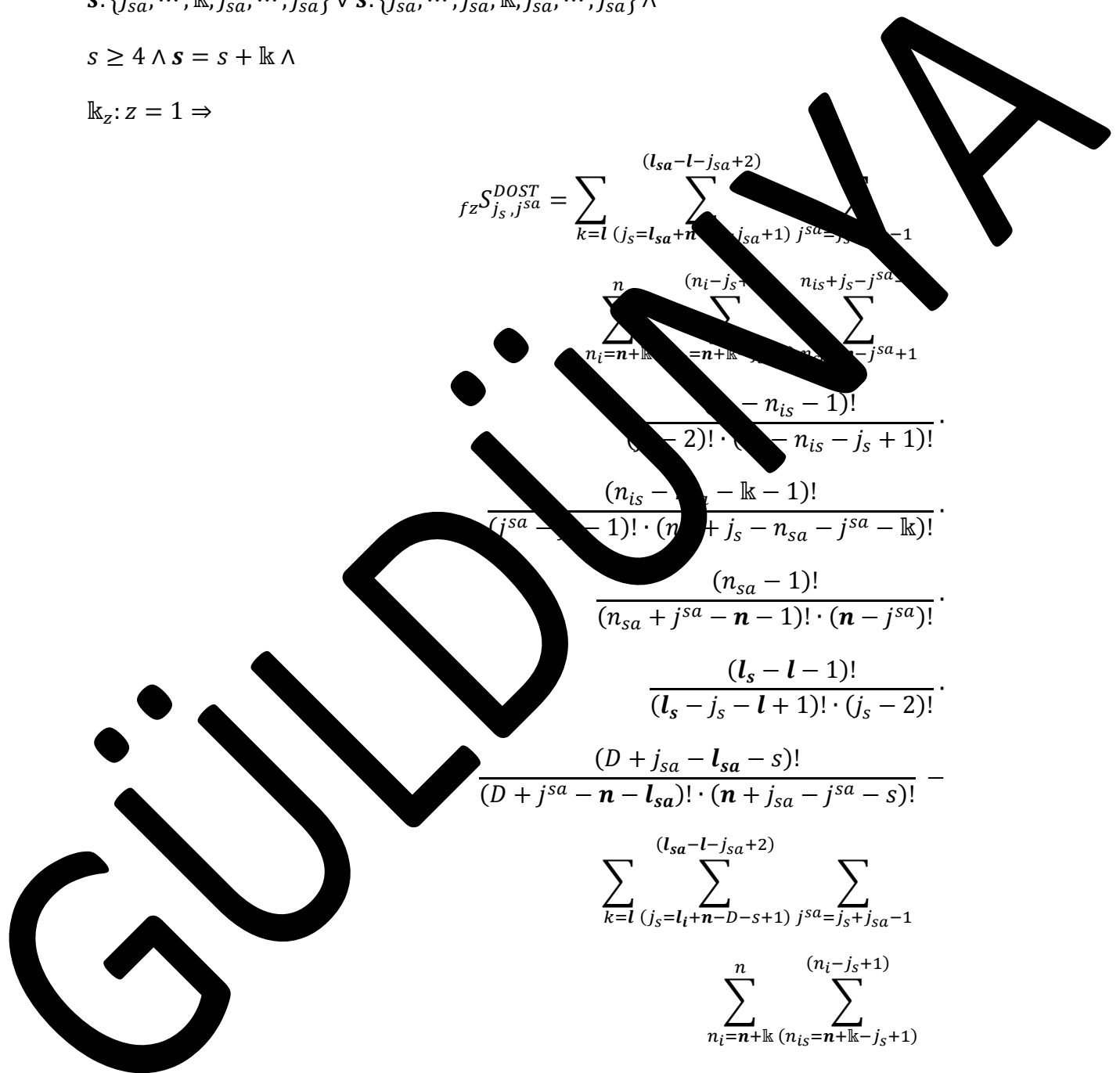
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_{sa}+n)}^{(j_{sa}+1)} \sum_{j_{sa}=j_s-1}^{(j_{sa}+1)} \frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_{is}+j_s-j_{sa})} \frac{(n_{is}-j_s+1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-j_s-\mathbb{k}-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} - \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_{sa}+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_{sa}+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \frac{(n_{is}-j_s+1)!}{(n_{is}-s-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n+j_{sa}-s-j_s)!} \cdot \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{POST} = \sum_{k=l}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{j_{sa}^{sa} = (j_s - l_{ik} + n - D - j_{sa}^{ik} + 1)}^{j_{sa}^{sa} = j_s + j_{sa} - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} j_{sa}^{sa=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{sa})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}^{ik})} \frac{(n_{is}-s-l_k)!}{(n_{is}+j_s-n-l_k-j_{sa}^s-j_{sa}^{sa})!} \cdot \frac{(n+j_{sa}^s-j_s)!}{(l_s-l-1)!} \cdot \frac{(l_s-l+1)! \cdot (j_s-2)!}{(D-l)!} \cdot \frac{(n+j_{sa}^s-j_{sa}^s-s)!}{(D+j_{sa}^s+s-n-l_k-j_{sa}^s-j_{sa}^{sa})!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = l_s > 0 \wedge$

$j_s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{l_s, \dots, l_k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{l_s, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$

$l_s \geq 4 \wedge l_s = s + l_k \wedge$

$l_{k_z}: z = 1 \Rightarrow$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)} j_{sa}^{sa=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{sa})}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}^{sa}-l_k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$



$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!}$$

$$\sum_{k=l}^{l_s-l+1} \sum_{j_s=l_i+n_{ik}+j_{sa}+1}^{j_s+l_{sa}+1} \sum_{j_{sa}=j_s+j_{sa}^{ik}-1}^{j_{sa}+j_{sa}^{ik}-1}$$

$$\sum_{n_i=n+l_{ik}+j_{sa}^{ik}-j_s+1}^n \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i-j_s+1)}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k})!}{(n_{is} - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1$$

$$l_s \leq j_s \leq j_s - j_{sa} + 1$$

$$j_s + j_s - 1 \leq j_s + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-k}}^{(n_{is}-s-k)}$$

$$\frac{(n_{is} + j_s - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(l_s - l_{sa} - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i, \dots, j_{sa}^i\} \quad S: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

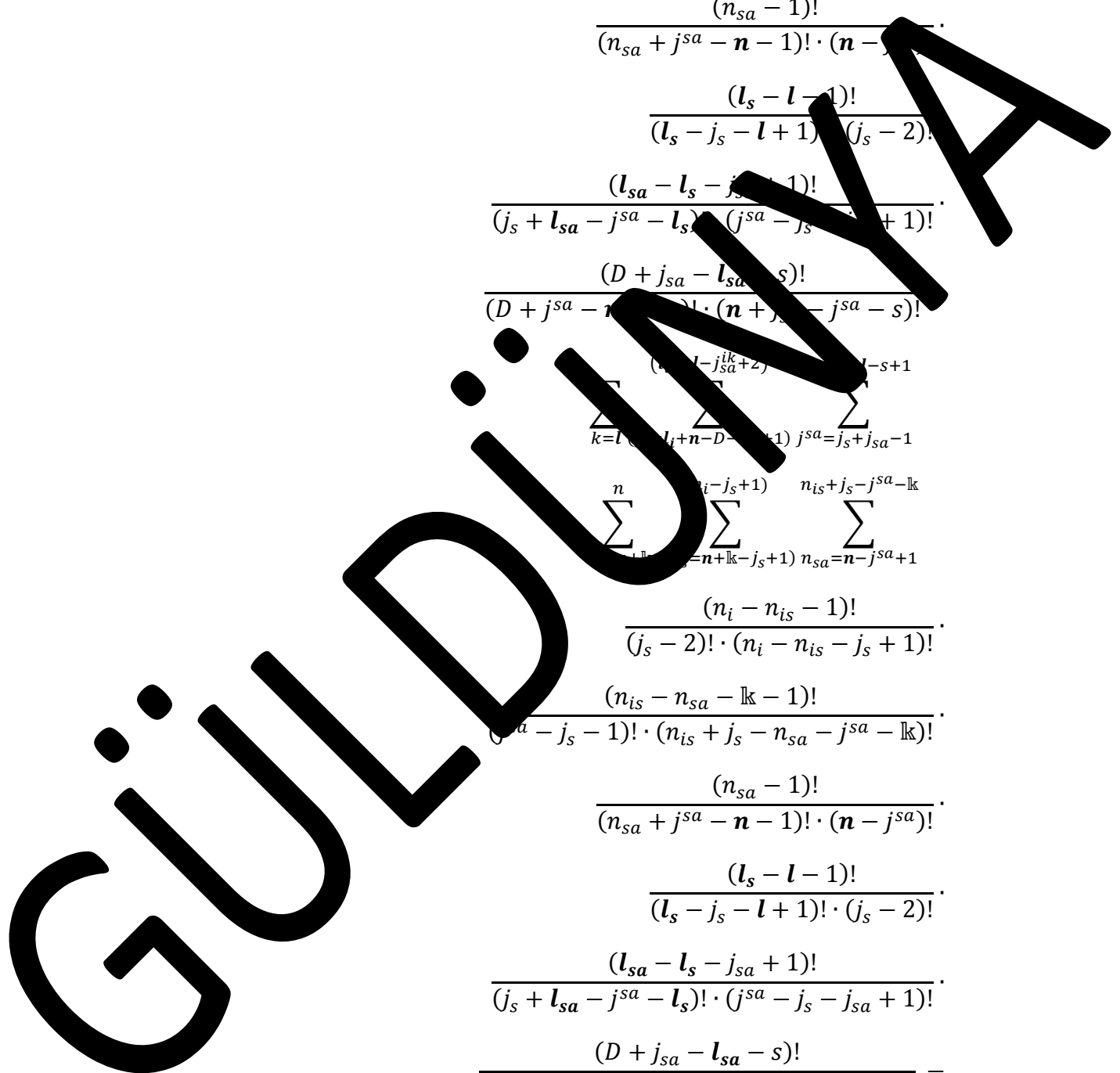
$$s \geq s = s + k \wedge$$

$$k_z: z = 1 =$$

$$f_z^{S_{j_s, j^{sa}}} = \sum_{k=l} \sum_{\binom{()}{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{()}{n_{is}=n+k-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{l_{ik}-j_{sa}^{ik}+2} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} j^{sa}=j_s+j_{sa}-1 \cdot \sum_{j_s=n+\mathbb{k}-j_s+1}^n \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n_{is} - j_{sa} - j_{sa} - 1)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge n_{ik} + j_{sa} - s = n_{is} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = n + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s - l + 1) - (j_s + j_{sa} - j^{sa} + 1)} \sum_{j_s = l_s + k}^{(n - j_s + 1) - (n_{is} + j_s - j^{sa} - k)} \sum_{j^{sa} = l_s + j_{sa} - k}^{(n_{is} + j_s - j^{sa} - k) - (n_{is} - 1)}$$

$$\sum_{n_i = n + k}^{(n_i - j_s + 1) - (n_{is} + j_s - j^{sa} - k)} \sum_{n_{is} = n + k - j_s + 1}^{(n_{is} - 1) - (n_{is} - j_s + 1)}$$

$$\frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - k - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{j_s = j^{sa} - j_{sa} + 1}^{( )} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{l_s + j_{sa} - l}$$

$$\sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk}} \frac{(n_{is}-s-lk)!}{(n_{is}+j_s-n-lk-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D \geq n < n \wedge l = lk > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk, j_{sa}, \dots, j_{sa}^l\} \vee \{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + lk \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$DOST_{j_s, j_{sa}} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^s+1}^{n_{is}+j_s-j_{sa}^s-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - lk - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s - lk)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^s - n - 1)! \cdot (n - j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-lk}$$

$$\frac{(n_{is} - j_s + 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n + j_s - n_{sa} - j^{sa} - lk)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{-lk})}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}^s - j_{sa} + 1)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa}^s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s - \mathbb{k})!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_{sa} - l + j_{sa}^{ik} - 1)} \sum_{(n_i = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1)}^{(n_i + j_s - j^{sa} - l_k)} \\
 & \sum_{n_i = n + l_k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_{is} + j_s - j^{sa} - l_k)} \sum_{j^{sa} + 1}^{(j^{sa} + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{is} - l_k - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \\
 & \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk)}^{( )}$$

$$\frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \dots > 0 \wedge$$

$$j_s \leq j_{sa}^s - 1 \wedge j_{sa}^{ik} = j_{sa}^s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, j_{sa}^{ik}, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + lk \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}^s}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j_{sa}^s=l_{sa}+n-D}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^s+1}^{n_{is}+j_s-j_{sa}^s-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+1)} \sum_{(j_s=l_i+n-D-j_s)}^{(j_s=l_i+n-D-j_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^{(n_i=n+\mathbb{k}-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

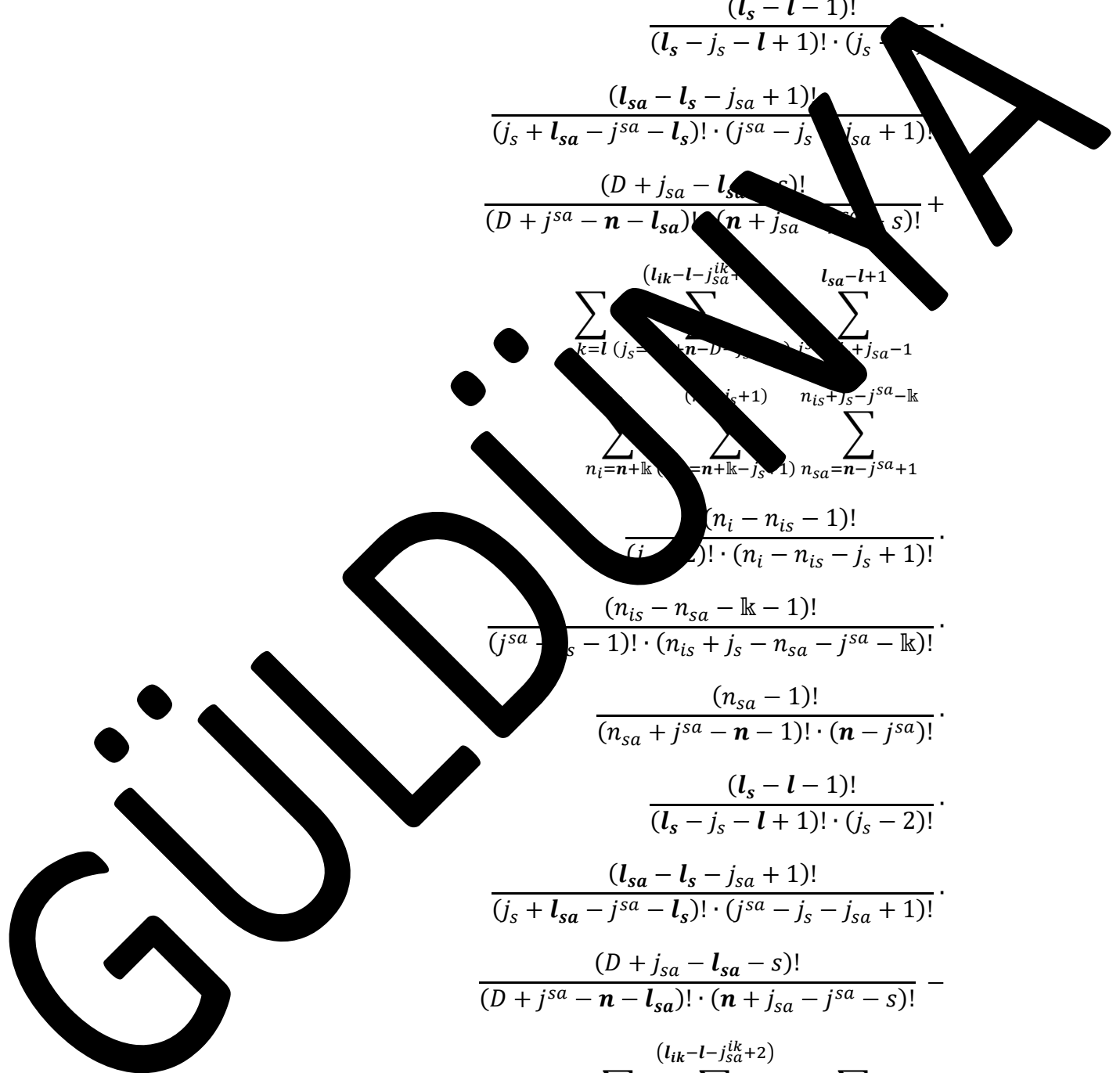
$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s=l_i+n-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_{sa}=j_s+j_{sa}-1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n - \mathbb{k} > \wedge$$

$$j_{sa}^s = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=l_s+n-D)}^{(j_{sa}-j_{sa}+1)} \sum_{j_{sa}^s=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{l_s-l+1} \sum_{l_s+n-D}^{l_s+n-D} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

GÜLDENWA

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{l_s+j_{sa}-l}^{( )} j^{sa}=l_{sa}+n-D$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{is} - s - \dots)}{(n_{is} + j_s - n - k - j_{sa}^{s})! \cdot (n + j_{sa} - j_s)!}$$

$$\frac{(j_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$(D - l - 1)!$$

$$\frac{(D + j^{sa} + s - n - l - j_{sa})!}{(n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

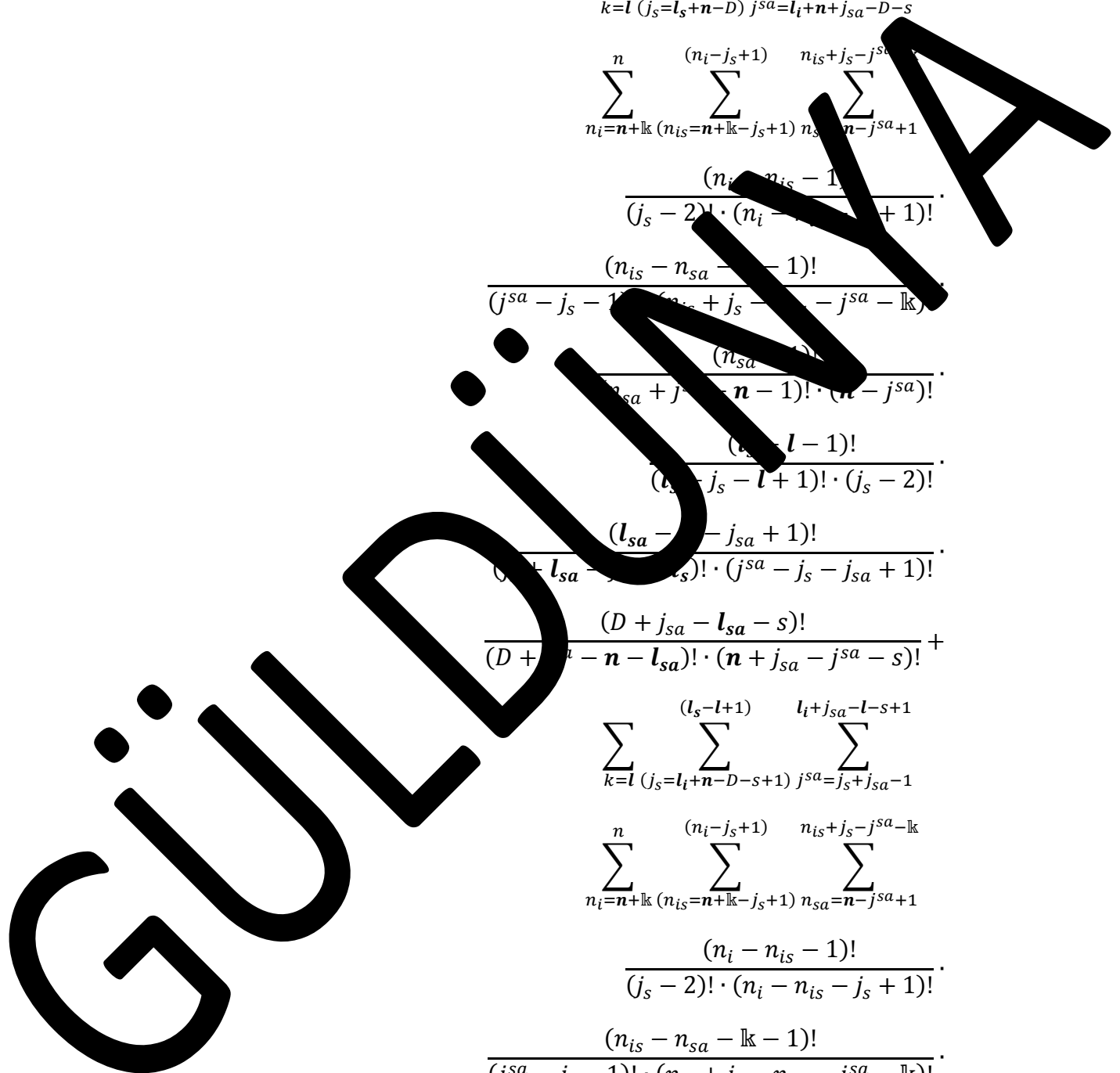
$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + l_{sa} - l - j_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$





$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^{(j_s+1)} \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=}^{(j_s+1)} \sum_{(n_{sa}=n+j_s+1)}^{(j_s+1)} \sum_{(j_s+1)}^{(j_s+1)}$$

$$\frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa})! \cdot (n + j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - i)!}{(D + j^{sa} - n - i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k} \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^i, \dots, j_{sa}, \mathbb{k}, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k} : z = 1 \Rightarrow$$

$$f_{z,j_s,j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_s-l+1} \sum_{j^{sa}=l_s+l+1}^{l_s-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{i_{sa}-k}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(j_s - 1)! \cdot (n_{sa} - j_s - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

GÜLDÜZ

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{(j_s=l_s+n-D-j_{sa})}^{(l_{sa}-D-j_{sa})} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_{sa}} \sum_{n_i=\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{n_{sa}=n-j_{sa}+1}^{n-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \sum_{k=0}^{l_i - l + 1} \sum_{i=l_i + n - k}^{n - k} \sum_{j_{sa}=j_s + j_{sa} - 1}^{n} \sum_{n_i=n+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_{is} - s - \mathbb{k})!} \cdot \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)} \sum_{j_{sa}^{ik}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}^{ik}+2}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa}^{ik} + 1} \sum_{j^{sa} = l_{ik} + j_{sa} - j_{sa}^{ik} + 2}$$

$$\sum_{n_i = \dots}^n \sum_{(n_{is} = n + k - j_s)}^{(j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} - j_s - k}$$

$$\frac{(n_i - n_{is} - k)!}{(j_s - 1)! \cdot (n_i - n_{is} - k + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - k - 1)!}{(j_s - 1)! \cdot (n_{sa} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik}} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}^{( )}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zj} S_{j_{sa}}^{ST} = \left( \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}}^{n_{is}+j_s-j_{sa}-\mathbb{k}}^{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}}^{n_{is}+j_s-j^{sa}-lk} \right. \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}-lk} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - 1)!} \cdot \\
 & \frac{(n - j^{sa} - 1)!}{(n - j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
 & \left. \frac{(D + j_{sa} - n_{sa} - s)!}{(D + j_{sa} - n_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-lk} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{is}-s-lk)!} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-lk)}^{(n_{is}+j_s-n-lk-j_{sa}^s)!} \\
 & \frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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A

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_{sa}}^{ST} = \left( \sum_{k=l} \sum_{(j_s=j)} \sum_{(j_{sa}=j)} \sum_{(j_{sa}=l-j_{sa}^{ik}+1)} \sum_{j_{sa}=l_{sa}+n-D} \sum_{n_i=n+k} \sum_{(n_{is}=n+k-j_s+1)} \sum_{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1} \sum_{n_{is}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l} \sum_{(j_s=2)} \sum_{j_{sa}=l_{sa}+n-D} \sum_{(j_{sa}-j_{sa})} l_{ik}+j_{sa}-l-j_{sa}^{ik}+1 \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(D + j_{sa} - l_{sa} - j_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{\mathbb{k}} \sum_{(j_s)}^{(l_{ik}-l_{sa}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{lk})}^{\binom{()}{n_{is}-s-n_{ik}}}$$

$$\frac{(n_{is}-s-n_{ik})!}{(n_{is}+j_s-n-l_k-j_{sa}^s) \cdot (n+j_{sa}^s-j_s)!}$$

$$\frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!}$$

$$(D-l-1)!$$

$$\frac{(D-l-1)!}{(D+j^{sa}+s-n-l_k-j_{sa}^s) \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l_s - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa}^{lk} \wedge$$

$$D - j_{sa} - n - l_{sa} \leq D - l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, j_{sa}^{ik}\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 4 \wedge j_{sa}^s + l_k \wedge$$

$$l_{k_z}: z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{\binom{()}{j_s=2}} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(l_s-l-j_{sa}^{ik}+2)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \sum_{j^{sa}=j_s+j_{sa}-1}^{n} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_{sa}^{DOST}}} = \left( \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 1)} \sum_{(j_s = n - D - j_{sa} + 1)}^{(n - D - j_{sa} + 1)} \sum_{(i_s = n - j_{sa} + 1)}^{(n - j_{sa} + 1)} \right. \\ \sum_{n_i = n + k}^{(n_i = n + k)} \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{sa} = n - j_{sa} - k} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ \frac{(n_{is} - n_{sa} - k - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s = 2)}^{l_{sa} - l + 1} \sum_{j_{sa} = l_{sa} + n - D}^{l_{sa} - l + 1} \right. \\ \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - k} \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{j_s=l_i+n-D-s+1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^{n_i+n+\mathbb{k}-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{j_s=l_i+n-D-s+1}^{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-j_{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_s \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = n + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_s=j_{sa}^s-j_{sa}+1}} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_s+j_s-l} \frac{j^{sa}-l_{ik}+n+j_s-1-j_{sa}^{ik}}{D-j_{sa}^{ik}} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D}{j_s + j_{sa} - j^{sa} - 1}} \sum_{\substack{l_s + j_{sa} - j^{sa} - 1 \\ j_s = j^{sa} - j_{sa} - 1 \\ n_{sa} = l_i + n + j_{sa} - j^{sa} - 1}} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n_{is} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s^{ik} - j_{sa}^{ik}}^{\binom{n_i - j_s + 1}{j_s + 1}} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}}^{\binom{n_i - j_s + 1}{j_s + 1}} \frac{(n_{is} - \mathbb{k} - j_s^s)!}{(n_{is} - \mathbb{k} - j_s^s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i, l \leq D - n + 1 \wedge$$

$$D + l_s + j_s - n - l_{sa} - 1 \leq l \leq i - 1 \wedge$$

$$1 \leq j^{sa} - j_{sa} - 1$$

$$j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$$

$$i - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_s}^{n} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{is}+j_{sa}+1}^{n_i-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{sa}-n_{is}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{sa}+j_s-n_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-n_{is}-\mathbb{k}-1)!}{(n_{sa}-n_{is}-\mathbb{k}-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j_{sa}-l_s)! \cdot (j_{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_s-l+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^k, j_{sa}, \dots, j_{sa}^i\},$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \left( \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
 & \frac{(D + j_s - l_{sa} - s)!}{(D + j_s - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

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$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + l_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + l_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} = D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=1}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n_{is} - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - 1 + 1)!}{(l_s - l_s - 1 + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa})! \cdot l_{sa} - s)!}{(D + j_{sa} + j^{sa} - n - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq (D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > i \wedge$$

$$j_{sa} - j_s - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq j_{sa} - j_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=l}^{(l_s-l+1)} \sum_{j_s=2}^{j_s} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s$$

$$l_{sa} - j_{sa} + 1 > l_{sa} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = l \wedge l_s > 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, \dots, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > l \wedge l = s + l_k \wedge$$

$$l_k: z = 1 =$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \right)$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=1}^{l_s - j_s} \sum_{l=j_{sa}+2}^{l_s + j_{sa} - k} \frac{(n_i - j_s + 1)!}{(n_i - n_{is} - j_s + 1)!} \frac{(n_{is} + j_s - j^{sa} - \mathbb{k})!}{(n_{is} - n_{sa} - \mathbb{k} - 1)!} \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - \mathbf{n} - l_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{l_{sa} - l + 1} \sum_{j^{sa} = l_s + j_{sa} - l + 1}$$

$$\sum_{n_i = \mathbf{n} + \mathbb{k}}^{\mathbf{n}} \sum_{(n_{is} = \mathbf{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = \mathbf{n} - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=l}^{(j_s)} \sum_{j_s=j_s+1}^{(j_s)} \sum_{j^{sa}=j^{sa}+1}^{(j_s)-l} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(j_s)} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$((D \geq n < n) \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 - j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_s \leq j_{sa} - j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4, \mathbb{k} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_s-l+1} \sum_{j^{sa}=j_s}^{j^{sa}+1} \right) \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{j^{sa}+1}^{j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_s-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{\mathcal{S}_{j_s, j_{sa}}^{DOST}} = \left( \sum_{k=l}^{j^{sa}-j_{sa}} \sum_{j_{sa}^i=j_{sa}-k}^{j_{sa}-k} \sum_{j_{sa}^s=l_{sa}+n-D}^{j_{sa}-k-l} \sum_{n_i=n}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n-j_s+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j_{sa}^i=l_{sa}+n-D}^{l_s+j_{sa}-l} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

GÜLDÜZÜMÜSÜ

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s=j^{sa}-j_{sa}+1)} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} j^{sa} = l_i + n + j_{sa} - D - s$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\frac{(n_{is} - s - \dots)}{(n_{is} + j_s - n - k - j_{sa}^{s})! \cdot (n + j_{sa} - j_s)!}$$

$$(j_s - l - 1)!$$

$$(j_s - l + 1)! \cdot (j_s - 2)!$$

$$(D - l)!$$

$$\frac{(D + j^{sa} + s - n - l_i - j_{sa})!}{(n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - k + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} >$$

$$D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - k + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq l_i - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=} \sum_{(n_{sa}=+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{is} - k)!}{(n_{is} + j_s - n - k - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - i)!}{(D + j^{sa} - n - i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + l_{sa} - n < l_{sa} + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \dots + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \right. \\ \left. \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{(l_{sa} - l + 1)} \sum_{j^{sa}=n-D}^{(n - D)} \right) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n - j_s + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n - j^{sa} - k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=l_{sa} + n - D - j_{sa} + 1)}^{(l_{sa} - l + 1)} \sum_{j^{sa}=j_s + j_{sa}}^{(l_{sa} - l + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i - j_s + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is} + j_s - j^{sa} - k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_s - l + 1)} \sum_{j_s = l_i + n - k}^{(n - j_s + 1)} \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n_{is} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s}^{(n_{is} - j_s + 1)} \sum_{j_{sa} = n_{ik} + j_{sa} - j_{sa} - \mathbb{k}}^{(n_{is} - j_s + 1)} \frac{(n_{is} - \mathbb{k} - j_{sa})!}{(n_{is} - \mathbb{k} - j_{sa})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i, l_i \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1$$

$$j_s + 1 \leq j_s - n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_{ik} \leq D - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(\quad)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_s=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_s - l_{sa} - s)!}{(D + j_s - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\quad)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

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$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{POST} = \sum_{k=l}^{\binom{()}{l_{sa}-l+1}} \sum_{j_s=j_{sa}-j_{sa}+1}^{\binom{()}{j_{sa}-j_{sa}+1}} \sum_{n_i=n+k}^{\binom{()}{n_i-j_s}} \sum_{n_{is}=n+k-j_s+1}^{\binom{()}{n_{is}+j_s-j_{sa}-k}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{()}{n_{sa}+j_{sa}-n-1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_s=j_{sa}-j_{sa}+1}^{\binom{()}{j_{sa}-l+1}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{\binom{()}{j_{sa}-l+1}} \sum_{n_i=n+k}^{\binom{()}{n_i-j_s+1}} \sum_{n_{is}=n+k-j_s+1}^{\binom{()}{n_{is}+j_s-j_{sa}-k}}$$

$$\frac{\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)} \frac{(n_{is}-s-\mathbb{k})!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l)!} \cdot \frac{(D-l_i)!}{(D+j_{sa}^s+s-n-l_i-j_{sa})! \cdot (n+j_{sa}^s-s-s)!}}{1}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_s - s > l_s \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k}: z = 1 =$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j_{sa}^s-j_{sa}+1)}^{(\cdot)} \sum_{j_{sa}^s=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa}^s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa}^s - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa}^s - n - 1)! \cdot (n - j_{sa}^s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+1}^n \sum_{n_{ik}=n+1}^{n_{sa}=n+1} \frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$+ s - n < l_i \leq D + n + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\} \vee \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-k}^{n_{is}+j_s-j^{sa}-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - k)!} \cdot \\
 &\frac{(n_{is} - 1)!}{(n_{is} + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 &\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 &\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \\
 &\frac{(n_{is} - s - k)!}{(n_{is} + j_s - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{j_s=2} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j_{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{j_s=2} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk)}^{( )} \frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_s - s > l_s \wedge$

$l_i \leq D + s - n \wedge$

$D \geq n < n \wedge l = lk > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - j_{sa}^s \leq j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \dots, lk, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + 1 \wedge$

$lk : z = 1 =$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - lk - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - lk)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s + j_{sa} - \dots} \sum_{n_i=n+1}^n \sum_{(n_{is} = n + j_s - \dots)} \sum_{(n_{sa} = n - j_{sa} - \dots)} \frac{(n_{is} - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)!} \cdot \frac{(n + j_{sa}^s - s - j_s)!}{(l_s - l - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq l \wedge l_s \leq D - \dots + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} - \dots \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + \dots - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge \dots + j_{sa}^{ik} - l_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$\dots + j_{sa} - \dots < l_{sa} \leq D \wedge l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq \dots < n \wedge l \dots \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j^{sa}-k} \sum_{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n - l_s - j_s + 1)!}{(n + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{n_{is}+j_s-j^{sa}-k} \sum_{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{ik}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{is} - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}{(n_{is} + j_s - n - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l_k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq n - 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s$$

$$l_i - j_{sa}^{ik} + l_s = l_s \wedge l_s + j_{sa} - j_{sa} > l_i \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_i + j_s - n - j_{sa}^{ik} \wedge$$

$$D \geq l_i < n \wedge l = l_k > l_s \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, l_k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = l_k + 1 \wedge$$

$$l_k \geq 2 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{\mathbb{k}} \sum_{(j_s)}^{(l_{ik}-l-1+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}=l_{sa}+n-D} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{is}-s-l_{sa})!}{(n_{is}+j_s-n-l_k-j_{sa})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-l)!}{(D+j^{sa}+s-n-l_k-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$$

$$D + j_s - n < l_{sa} \wedge D + l_s + j_{sa} - n - 1$$

$$D + n < n \wedge l = k > 0$$

$$j_{sa} < j_{sa}^l - 1 \wedge j_{sa}^{lk} < j_{sa} - 1 \wedge j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, j_{sa}, \dots, j_{sa}^i\} \quad s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = j_{sa} - l_k \wedge$$

$$l_k = 1$$

$$fz_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{n} \sum_{j_s=l_i+n-D-s+1}^{i-j_s+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n+\mathbb{k}-j_s+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j_s=l_i+n-D-s+1}^{i-j_s+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)}{(D + j_{sa} + s - n - l - j_{sa})! \cdot (n_{is} - j_{sa} - j_{sa}^s - 1)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge n_{is} - j_{sa} - s = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^s - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge j_{sa}^s - j_{sa}^{ik} - 1 = j_{sa} - 1 - j_{sa}^{ik}$$

$$s \in \{j_{sa}^s, \dots, l_k\} \cup \{j_{sa}^s, \dots, j_{sa}^s\} \wedge S: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}^s, \dots, j_{sa}^s\} \wedge$$

$$s \geq 4 \wedge s = s + l_k$$

$$l_k: z = \dots \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_s + j_{sa} - l} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{i=0}^{l_s-l} \sum_{k=0}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{j_s=0}^{n_{is}-j_s-j^{sa}-l+1} \sum_{n_i=n+k}^{n+k-j_s-1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

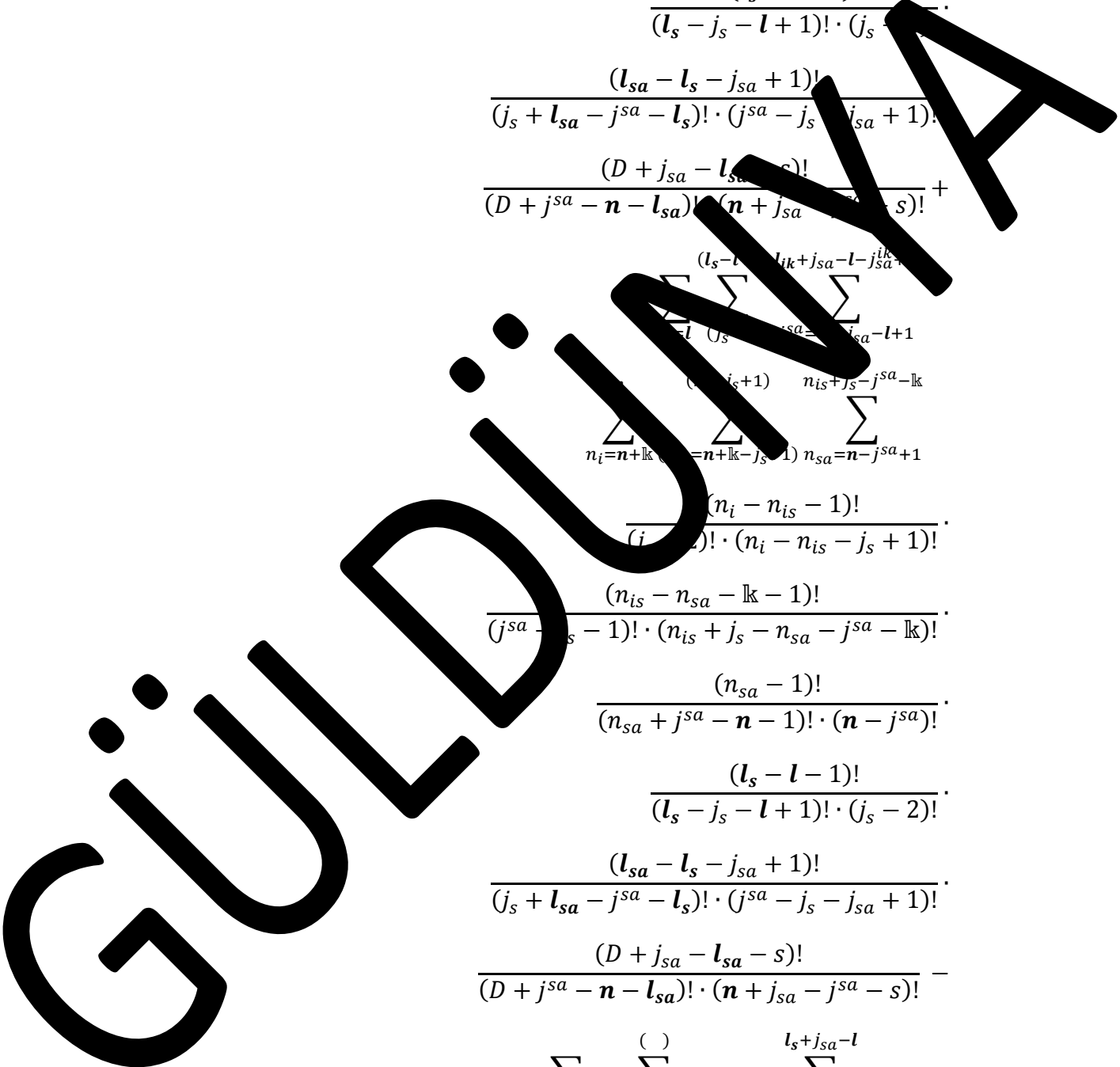
$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{j_s=j^{sa}-j_{sa}+1}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)}$$





$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk}^{(\cdot)}$$

$$\frac{(n_{is} - s - lk)!}{(n_{is} + j_s - n - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa}^s - j_{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_s \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, lk, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$lk : z = 1 \wedge$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=n+lk}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}^{sa}-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - lk - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - lk)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}-l_k} \\
 & \frac{(n_{is}-n_{sa}-1)!}{(j_s-1) \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_i + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{sa}-j_s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}
 \end{aligned}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^s + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s > 0 \wedge$$

$$j_s \leq j_{sa} - j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^{ik}\} \vee s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}, j_{sa}, \dots, j_{sa}^{ik}\} \wedge$$

$$s \geq 4, l = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{j_s = j_s - j_{sa}^{ik} + 2}^{l_{sa} - l + 1} \sum_{n_i = n + k}^{(n_i + 1)} \sum_{n_{sa} = n - j^{sa} - k}^{n_{is} + j_s - j^{sa} - k} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{sa} = n - j^{sa} + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = j_{sa} + 1}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})}^{(\cdot)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D > n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}^{ik}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n - j_{sa} - 1)!}{(n + l_{sa} - j^{sa} - j_s)! \cdot (n - j_{sa} - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{\mathbb{k}} \sum_{(j_s=2)}^{l-j_{sa}+2} \sum_{j^{sa}=j_s+j_{sa}-1}^{n-l-j_{sa}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{()} \\
 & \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{D, D} = \sum_{k=l}^{(l_s - n - D - j_{sa})} \sum_{(j_s=2)}^{l_{sa} - l + 1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} j_{sa}^{sa=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}}^{n_{is}+j_s-j_{sa}^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - j_{sa} - l_k)!} \cdot \\
 & \frac{(n + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!}{(n + j_{sa} - n - 1)! \cdot (n - j_{sa}^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - l_s - j_{sa} + 1)! \cdot (j_{sa}^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa}^{sa})! \cdot (l_{sa} - s)!}{(n + j_{sa}^{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l+1)} j_{sa}^{sa=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
 & \frac{(n_{is} - s - l_k)!}{(n_{is} + j_s - n - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa}^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$



$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$S: \{j_{sa}^s, \dots, \mathbb{k}, \dots, j_{sa}^i\} \wedge S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s - l)} \sum_{(j_s - 2)}^{l_s + j_{sa} - s + 1} \sum_{j^{sa} = l_s + j_{sa} - k}^{n_{is} + j_s - j^{sa} - k} \sum_{n_i = n + k}^{(n_{is} - n + k - j_s + 1)} \sum_{(n_{is} - n + k - j_s + 1)}^{j^{sa} + 1} \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{is} - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(\cdot)}$$

$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(D - l_i)!}{(D + j_{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{sa}^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_{sa}^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + j^{sa} - l_{sa} - l + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
 &\frac{(n_{is} - n_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(\cdot)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j^{sa}=l_{sa}+n-1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n}^n \sum_{n_i=n+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=n}^{(\cdot)} \sum_{(n_{sa}=n+1)}^{(\cdot)} \sum_{j^{sa}=l_{sa}-j_{sa}-k}^{(\cdot)}$$

$$\frac{(n_{is} + j_s - n - k - j_{sa})!}{(n_{is} + j_s - n - k - j_{sa})! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_i)!}{(D + j^{sa} - n - l - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOS} = \sum_{l=1}^{j_s} \sum_{j_s^{sa}=l_i+n+j_{sa}-D-s}^{j_s^{sa}=l_i+n+j_{sa}-D-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=1}^{l-1} \sum_{(j_{sa}=n-D-s+1)}^{l-1} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
& \frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$



$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \{j_{sa}^s, \dots, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{DOST} S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_i+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{(n-j_s+1)}$$

$$\frac{(n_{is}-1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - j^{sa} - 1)! \cdot (j_s + j_s - j_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

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$$\frac{(n_{is} - s - \mathbb{k})!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - \mathbf{n} - l_i - j_{sa})! \cdot (\mathbf{n} + j_{sa} - j^{sa})!}$$

$$\left( (D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \vee$$

$$(D \geq \mathbf{n} < n \wedge l = l_i \wedge l_s \leq D - \mathbf{n} + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq \mathbf{n} + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - \mathbf{n}) \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

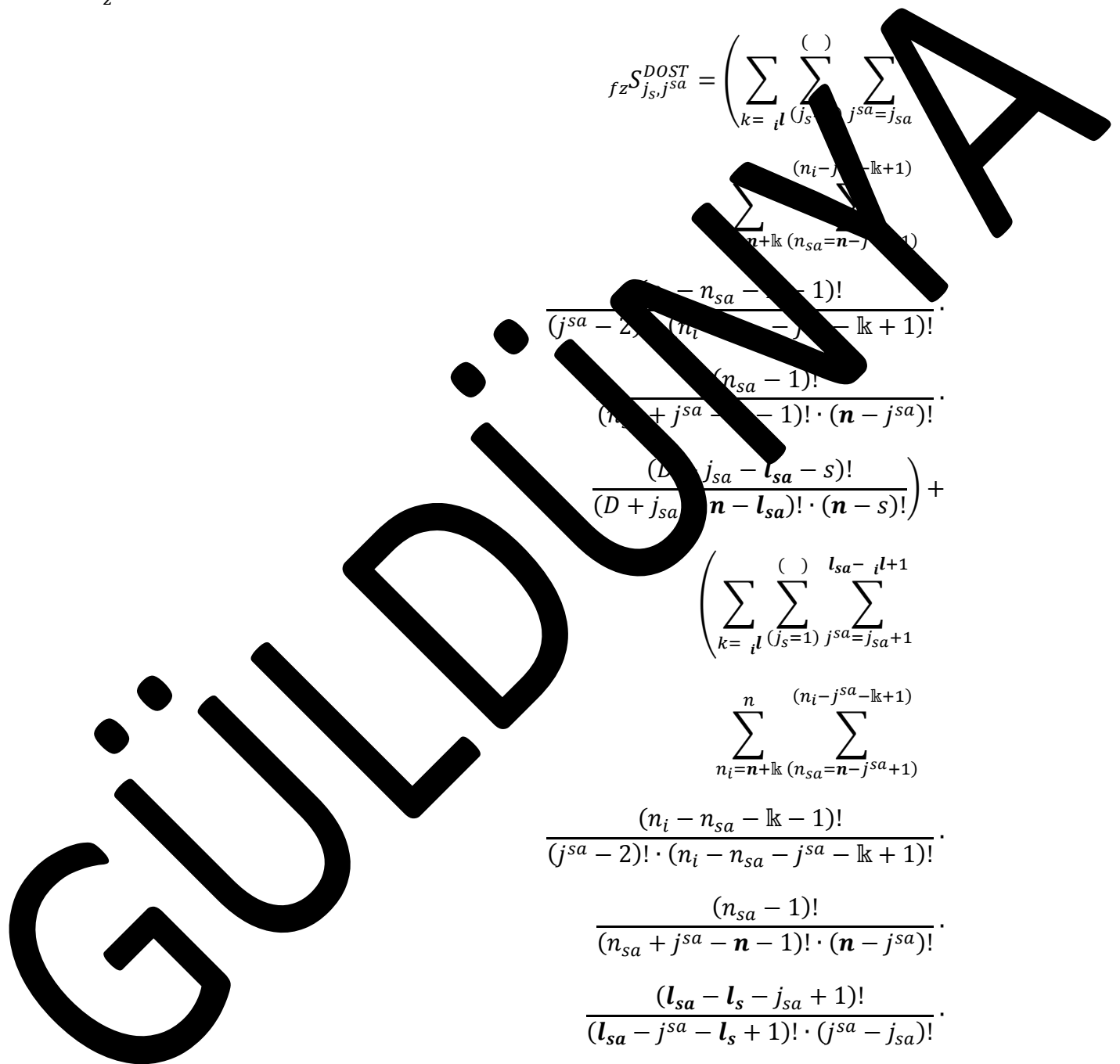
$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s j_{sa}}^{DOST} = \left( \sum_{k=i}^{\binom{()}{j_s}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{j_s}} \frac{(n_i - j_{sa} - \mathbb{k} + 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left( \sum_{k=i}^{\binom{()}{j_s=1}} \sum_{j_{sa}=j_{sa}+1}^{\binom{()}{j_s=1}} \sum_{n_i=n+\mathbb{k}}^{\binom{()}{j_s=1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{()}{j_s=1}} \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j_{sa} - l_s + 1)! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) -$$

$$\sum_{k=i}^{\binom{()}{j_s=1}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s=1}} \sum_{j_{sa}=j_{sa}}^{\binom{()}{j_s=1}}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \frac{(n_i + j_s - s - \mathbb{k} - j_{sa}^s)!}{(n_i + j_s - n - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^n \sum_{\binom{()}{j_s=1}} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{sa}=n-j_{sa}+1}}^{(n_i - j_{sa} - \mathbb{k} + 1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - 2)! \cdot (n_i - n_{sa} - j_{sa} - \mathbb{k} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!}$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_s=1)}^{\binom{()}{l}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{\binom{()}{l}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}}$$

$$\frac{(n_i + j_s - s - k - j_{sa}^s)!}{(n_i + j_s - n - k - j_{sa}^s)! (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! (n - s)!}$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k} \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + 1 \wedge$$

$$\mathbb{k} : z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=1}^l \sum_{(j_s=1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=i}^{\binom{()}{j_s=1}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\binom{()}{n_{ik}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1}} \sum_{n_{sa}=n_{ik}-j_{sa}-l_k}$$

$$\frac{(n_i + j_s - s - l_k - j_s)!}{(n_i + j_s - n - l_k - j_s)! \cdot (n - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - l_i)!}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s=j^{sa}}^{j_s=j^{sa}+1} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}=l_{sa}+n-D} \sum_{n_i=n}^{n_i=j_s} \sum_{n_{is}=n-j_s+1}^{n_{is}=n-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{j^{sa}-j_{sa}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{j_s=l_{ik}+n-D-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}=l_{sa}+n-D} \right. \\
 & \left. \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_{is}=n-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{(j_s = l_{ik} + n_{is} - j_{sa}^{ik} + 1)}^{(n_{is} - j_s + 1)} \sum_{(l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2)}^{(n_{is} + j_s - j^{sa})} \\
 & \sum_{(n_{is} = n - j_s + 1)}^n \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{is} + j_s - j^{sa})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}
 \end{aligned}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\cdot)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!} \cdot \frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!} \cdot (D - l_i)}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik}$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z^{S_{j_s, j^{sa} DOSt}} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, n_{sa}=l_i+n+j_{sa}-j_{sa}+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k, \dots, n_{is}-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - j_{sa} + 1 \wedge$$

$$2 \leq l \leq D - l_s + j_{sa} - j_{sa} - l_{sa} \wedge$$

$$2 \leq j_s + j_{sa} - j_{sa} - l_{sa} \wedge$$

$$j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$$

$$j_s + j_{sa} - 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) \cdot \\ \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)!} \cdot (j^{sa} - j_s - 1)! \cdot$$

$$\frac{(l_{sa} - j_{sa} - l - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - j_{sa} + 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -$$

$$\sum_{k=l} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j}^{SDG} = \left( \sum_{k=l}^{(j_s)} \sum_{(j_s=j^{sa}-j_{sa}-1)}^{(j_s)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \right)$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} + 1)!}{(l_s + l_{sa} - j^{sa} - l_s)! \cdot (l_s - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{l-1} \sum_{(l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$



$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa} + (n + j_{sa} - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l_s + n + 1$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s + j_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa} - k \wedge$$

$$D \geq n < n \wedge k = 0$$

$$j_{sa}^{l_s} + j_{sa}^l - 1 \wedge j_{sa}^s + j_{sa} - 1$$

$$\{j_{sa}^s, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = j_s$$

$$fz_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{l_s + j_{sa} - l} \sum_{i=0}^{n - j_{sa} - l_s + k} \sum_{l=0}^{l_s + j_{sa} - l - i} \sum_{s=0}^{n_{is} - D - s} \binom{n_{is} + j_s + 1}{n_{is} + k - j_s + 1}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}}{n_{ik} + j_{sa}^s - j_{sa}^{ik} - n_{sa} - \mathbb{k} - j_{sa}^s}$$

$$\frac{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - n_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - n_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge D = n + 1 \wedge$$

$$2 \leq l \leq l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ \left. \frac{(D + j_s - l_{sa} - s)!}{(D + j_s - l_{sa} - n - j^{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \right) \\ \left( \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \right) \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s)}^{(n_i-j_s-j^{sa})}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(i_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!}{(n_{is} - 1)!}$$

$$\frac{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(l_s - l - 1)!}$$

$$\frac{(l_s - l - 1)!}{(j_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik})) \wedge$$

$$D \geq n < n \wedge l = k = 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1, s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j^{sa}} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j^{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(n_{sa}-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right) \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(n + j_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_s + j_{sa} - j^{sa} + 1}} \sum_{j^{sa} = l_i + n + k - D - s}^{\binom{n}{n_i = n + k - j_s + 1}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - l_s - s - k)! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$
- $(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{l_s-1} \sum_{j_{sa}=l_{sa}+n-j_{sa}+1}^{l_s-1} \sum_{j_s=j_s+j_{sa}-1}^{l_s-1} \right. \\ \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{j_s=l_s+n-D}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{i_s=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa})} j^{sa} = j_s + j_{sa} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{i_s=l_i+n-D-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}
 \end{aligned}$$

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$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\ )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!} \cdot \frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_{sa} + j_{sa} - s > \dots \wedge$

$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$

$s: 3 \wedge s = \dots$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(\ )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\ )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{n_i=n}^{(j_s+1)} \sum_{n_{ik}=n}^{(j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - k - s - l_s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D + j_{sa} - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge n_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$n_{ik} \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{s-1}, j_{sa}^i\} \wedge$$

$$j_{sa} > 3 \wedge s \Rightarrow$$

$$f_z^{S_{j_s, j^{sa}}} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i - l - 1)!}{(l_i + j^{sa} - n - 1)! \cdot (n_{is} - n_{sa} - s)!}$$

$$\sum_{k=l}^l \sum_{(j_s=j_s+1)}^{(j_s)} \sum_{j^{sa}=l_i+n+j^{sa}-D-s}^{l_{ik}+j^{sa}-l-j^{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{sa}-j^{sa}}^{(j_s)} \sum_{(n_{sa}=n_{ik}+j^{sa}-j^{sa}-k)}^{(j_s)}$$

$$\frac{(n_{ik} + j^{sa} + j^{sa} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j^{sa} - n - j_{sa} - k - j^{sa})! \cdot (n + j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = k = 0 \wedge$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{z} S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j_{sa}^l-j_{sa}+1)}^{( )} \sum_{j_{sa}^l=l_s+n+j_{sa}-D}^{l_s+j_{sa}-l} \sum_{n_i=n}^n \sum_{(n_{is}=n_{i_s}+k)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{s_a}+j_s-j_{sa}+1)}^{(n_{sa}=n_{s_a}+j_s-j_{sa}+1)} \frac{(n_{is}-1)! \cdot (n_{sa}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}-j_{sa}-n_{i_s}-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!} \sum_{k=l} \sum_{(j_s=j_{sa}^l-j_{sa}+1)}^{( )} \sum_{j_{sa}^l=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{i_s}+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{i_k}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \frac{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-j_{sa}-j_s-s-k)!}{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-n-j_{sa}-k-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

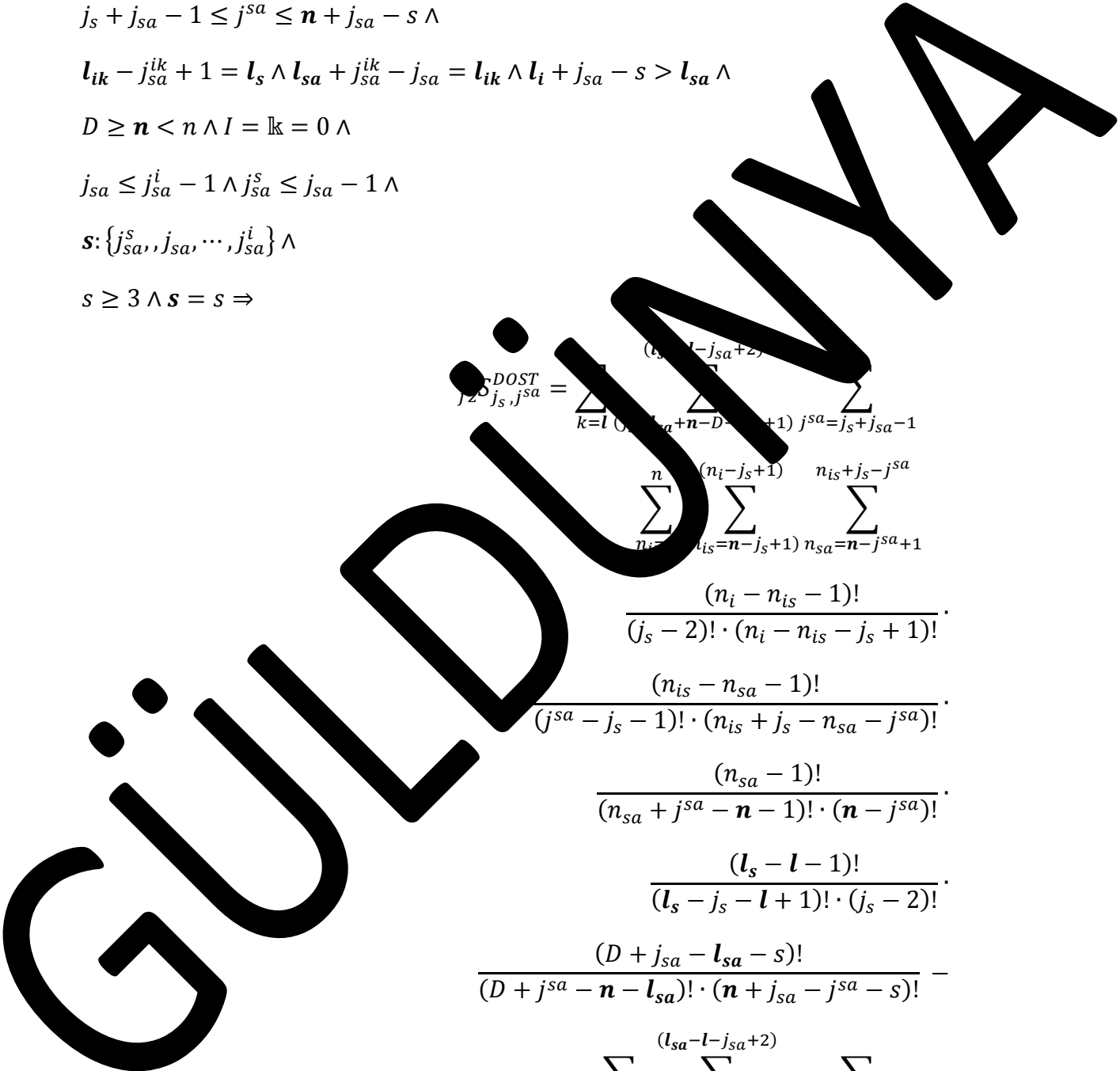
$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_{sa}-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(n_i-j_s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(n_i-j_s+1)} \sum_{n_i=n+k}^{(n_{is}=n+k-j_s+1)}$$





$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{z_{sa}}^{j_{sa}} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j_{sa}=j_s+j_{sa}-1} \frac{\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s}^{(n_{sa}=n_{ik}+j_{sa}-l_k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)!} \cdot \frac{(l_s - l - i)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j_s < n + j_{sa} - s \wedge$

$l_s - j_{sa}^{ik} + j_{sa}^{ik} \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = 0 \wedge$

$j_{sa} \leq j_s - 1 \wedge j_{sa}^s \leq j_s - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}, j_{sa}^{ik}\} \wedge$

$s > n = s \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s - l + 1)} \sum_{n_i=n+k}^{(n_i - j_s + 1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is} - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{ik} + j_{sa}^{ik})! \cdot (j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge D = n + 1 \wedge$$

$$2 \leq j_s \leq j_s^a - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$s \geq 3 \wedge s = s \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + l - j^{sa} - l)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D - j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_i+j_{sa}-l-s+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{( )}$$

$$\sum_{n_i=n}^n \sum_{(j_s+1)}^{( )}$$

$$\sum_{n_{ik}=n}^{( )} \sum_{(n_{sa}=n-j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s^s \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge n_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k = 0$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(D + j_{sa} - l_{sa} - j^{sa} - l_s)! \cdot (D + j_{sa} - j^{sa} - l_s + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{i=0}^{l_s} \sum_{(n_{is}=n-D-s+1)}^{(l_i - j_{sa}^{ik} + 2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(j_s=l_i+n-D-s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik})! \cdot (n + j_{sa}^{ik} - j_s)!}$$

$$\frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - j_s)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa}^{ik} \leq j_{sa}^{ik} - 1, j_{sa}^{ik} \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, \dots, j_{sa}^{ik}\}$$

$$\geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{(j_s=l_s+n-D)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l_s+l+1}^{l_s+l+1} \sum_{i_{ik}+j_{sa}-l-j_{sa}^{ik}}$$

$$\sum_{n_i=n-j_s+1}^n \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz^S_{j_s} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s)}^{(n_i-j_s-j^{sa})}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(i_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!}{(n_{is} - 1)!} \cdot$$

$$\frac{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}{(l_s - l - 1)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(j_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^D = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(j_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{-lk})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j^{sa}}^{ST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j^{sa})}^{(n_{is}+j_s-j^{sa})}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(i - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!}$$

$$\frac{(n_{sa} - n_{sa} - n - 1)! \cdot (n - j^{sa})!}{(l_s - l - 1)!}$$

$$\frac{(l_s - l - 1)!}{(j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge I = j_s = 0 \wedge$$

$$j_s \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^1, j_{sa}^2, \dots, j_{sa}^i\}$$

$$i \geq 3 \wedge i = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=0}^{(l_s - l) + (l_i + j_{sa} - l - s + 1)}$$

$$\sum_{n_i=0}^n \sum_{(n_{is}=n-j_s+1)}^{(n_{is}=n-j_s+1)} \sum_{n_{sa}=0}^{n_{sa}=n-j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s = \mathbb{k} - 1 \wedge$$

$$j_{sa}^s \geq j_{sa}^{l_s} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^{l_s}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_s+n-D)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{i=1}^{l-1} \sum_{(j_s=n-D-s+1)}^{i-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-l-s+1} \\
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^{ik} + j_s - s - k)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - n + 1)!}{(D + j^{sa} + s - n - j_{sa} - k - j_{sa}^{ik} + j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}))$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 \sigma_{j_s, j_{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
 \end{aligned}$$

$$\begin{aligned}
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{(n_i - j_s + 1)} \sum_{j^{sa} = l_s + j_{sa} - l + 1}^{l_{sa} - l + 1} \\
& \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{is} = n - j^{sa} + 1}^{n_{is} + j_s - 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j_s - 1)!} \cdot \\
& \frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)!} \cdot \frac{(n_{sa} - j_s - 1)!}{(n_{sa} - j_s - 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=l}^{( )} \sum_{(j_s = j^{sa} - j_{sa} + 1)}^{( )} \sum_{j^{sa} = l_s + n + j_{sa} - D - s}^{l_s + j_{sa} - l} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{( )} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}^{( )} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n}^{l_{sa}-l+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + j_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_{sa}-1}^{(l_s-l+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}^{(l_s-l+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(l_s-l+1)} \frac{(n_{ik} + j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} - l_s - k)!}{(n_{ik} + j_{sa}^{ik} + j_{sa}^{ik} - l_s - j_{sa} - k)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_{sa} - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l \neq i \wedge l \leq D + j_{sa} - n \wedge$

$1 \leq i \leq j^{sa} - j_{sa}$

$i + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D - n = l_i \wedge I = k = 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$

$s: \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s \Rightarrow$

$$fzS_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$



$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(n_{is}-j_{sa})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+2}^{n_{is}+j_s-j^{sa}} \right) \\
 & \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(n_{ik}=n+l_k-j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}+1} \sum_{j^{sa}=j_{sa}+1}^{j^{sa}=j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}=j_s+j_{sa}}^{(j_{sa}-1)} \sum_{n_i=n}^{(n_i-1)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_{sa})} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}-1)} \frac{(n_i - n_{is})!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{j_{sa}=j_s+j_{sa}}^{(j_{sa}-1)} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{(n_{is}+j_s-j_{sa})} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}-1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \right)$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} - 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l_s)} \sum_{j_s} \sum_{j^{sa}=j_s+j_{sa}} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s^{ik}}^{n_{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - l_s - l - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - l_s - l - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$

$2 \leq l \leq D - n + j_{sa} - l_{sa} \wedge$

$1 < j_s + j_{sa} - j_{sa} \wedge$

$j_s + j_{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$

$D \geq n < n \wedge l = k = 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D} \frac{l_{ik+j_{sa}-l-j_{sa}^{ik}+1}}{\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_s - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D} \frac{l_{ik+j_{sa}-l-j_{sa}^{ik}+1}}{\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right)$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} - l + 1} \sum_{j^{sa}=l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1}$$

$$\sum_{n_i=n}^n \sum_{(n_{i_s}=n-j_s)}^{(n_i - j_s + 1)} \sum_{(n_{i_s} = n - j_s + 1)}^{(n_i - j_s - j^{sa})}$$

$$\frac{(n_{i_s} - n_{i_s} - 1)!}{(n_{i_s} - 2)! \cdot (n_{i_s} - j_s + 1)!} \cdot$$

$$\frac{(n_{i_s} - n_{i_s} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{i_s} + j_s - j^{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{i_s} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(j_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_{sa}^{i_s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa} - l + 1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa} - l + 1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is} + j_s - j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-k)}^{(n_{sa}-n_{ik}+j_{sa}-k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - k)!} \cdot \frac{(l_s - l - k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_s \wedge$
- $1 \leq j_s \leq j^{sa} - j_{sa}$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa} \wedge j_s > l_{ik} \wedge$
- $D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$
- $D \geq n < n = k =$
- $j_s - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$
- $s: \{j_{sa}^s, j_{sa}^i, j_{sa}^l\} \wedge$
- $s \geq l_s = s \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$



$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
& \left( \sum_{k=l}^{(l_{sa}-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \\
& \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1}
\end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-l-j_{sa}+2)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_{is}+j_{sa}^{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_{sa}+j_{sa}^{ik}-j_{sa}^{ik})} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=i_{sa}-j_{sa}+1)}^{(l_s)} \sum_{j_{sa}=i_{sa}+n+j_{sa}-D-j_{sa}^{ik}}^{(l_s)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_s=2)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{(l_s+j_{sa}-l)} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{i=1}^{l_s-l} \sum_{k=1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}} \sum_{j_s=1}^{n_{is}-j_s+1} \sum_{n_{sa}=1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\}$$

$$s: 3 \wedge s = \dots$$

$$f_Z^{S_{j_s, j_{sa}^{sa}}} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_{sa}-1}^{(l_s-l+1)} \sum_{n_i=n}^n \sum_{(n_{is}=n+k-j_s+1)}^{(l_s-l+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{(l_s-l+1)} \frac{(n_{ik} + j_{sa}^{is} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{is} + j_{sa}^{ik} - j_{sa} - j_s - s - k)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^{is} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D > n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge 2 \leq l \leq D + l_s + j_s - n - 1 \wedge 1 \leq j_s = j_{sa}^s - j_{sa} \wedge j_s + j_{sa} \leq j_{sa}^s \leq n + j_s - s \wedge l_{ik} = j_{sa}^{ik} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge D + j_{sa}^{ik} - j_{sa} < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge D \geq n < n \wedge I = k = 0 \wedge j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)} j^{sa} = j_s + j_{sa} - 1 \right. \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l}^{(l_{ik}+n-D-j_s)} \sum_{(j_s=2)}^{(j_s=2)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} + j^{sa})!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l_s - 1)!}{(l_s - l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(l_s - l_s - j_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - l - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa}^{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D - n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - j_{sa} - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa} + j_s)!} \cdot \frac{(n + j_{sa} - j_s)!}{(l_s - l - 1)!} \cdot \frac{(l_s - l + 1)! \cdot (j_s - 2)!}{(D - l)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - j_{sa} - l_k - j_{sa} + j_s)!} \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq l_s + j_{sa} - n \wedge (l_i \leq D + s - n)$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_s}^{S_{j_s, j_s}} = \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{l_s-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{j_s=2}^{l_s-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(j_s - l)} \sum_{(j_s = j_{sa}^{sa} + 1)}^{(j_s - l)} \sum_{j_{sa} = j_{sa} + 1}^{(j_s - l)} \right. \\ \left. \sum_{n_i = n}^{(n_i - j_s + 1)} \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_i - j_s + 1)} \right. \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(j_{sa} - j_{sa})} \sum_{(j_s = 2)}^{(j_{sa} - j_{sa})} \sum_{j_{sa} = j_{sa} + 2}^{(j_{sa} - j_{sa})} \right. \\ \left. \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{(n_{is} + j_s - j_{sa})} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{i=l}^{(l_s - l)} \sum_{j_s=j_s}^{l_{sa}-l+1} \sum_{j_{sa}=j_{sa}+1}^{n_{is}-j_s-j^{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j_s - l - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$



$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{j_{sa}=j_s}^{(l_s-l+1)} \sum_{i_{sa}=1}^{(l_s-l+1)} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \right)$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j=2)} \sum_{j^{sa}=j_{sa}-1}^n \sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{(j_s-l_k)} \sum_{n_{is}+j_{sa}^{s}-j_{sa}^{s}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - l_k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $(D \geq n < n \wedge l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $1 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$
- $(D + j_{sa} - l_{sa} < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$
- $(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $1 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^i, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_Z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)}^{( )} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_i=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{+j_{sa}-l} \sum_{j^{sa}=n-D}^{+n-D} \right) \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_{is}=n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_{is}=n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1, \dots, j^{sa}=l_i+n+j_{sa}-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1, \dots, n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j_{sa} + j_s^{ik} - j_{sa} - l_k - j_s^s)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq k = i l \wedge l_s \leq D - n - 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \dots$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - s)!} \cdot$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{n_i=n+l+k-j_s-1}^{(n_{is}+j_s+1)} \sum_{n_{is}=n+l+k-j_s+1}^{(n_{is}+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik} \ (n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{( )}$$

$$\frac{(n_{ik} + j^{sa})^{j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - n_{sa} - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n < n_{sa} \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - l_s + j_{sa} - n - l_{sa} \wedge$$

$$l < j_s \leq n - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = \mathbb{1} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{i, s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s \neq i \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \right)$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \left( \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!} + \sum_{k=l}^{(l_{sa} + n - l_{sa} - 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{l_{sa} - l + 1} \sum_{j^{sa} = j_s + j_{sa}}^{l_{sa} - l + 1} \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{is} + j_s - j^{sa})} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_{sa} + n - D - j_{sa} + 1)}^{(l_s - l + 1)} \sum_{j^{sa} = j_s + j_{sa}}^{l_{sa} - l + 1} \sum_{n_i = n}^n \sum_{(n_{is} = n - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{is} + j_s - j^{sa})}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_i - j_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=0}^{l_i - l + 1} \sum_{l_i + n - D + k + 1}^{j^{sa} - j_s + j_{sa} - 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_{sa}^{ik} - j_{sa}^{ik}}^{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 - j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$l_i \leq D + s - n \wedge$

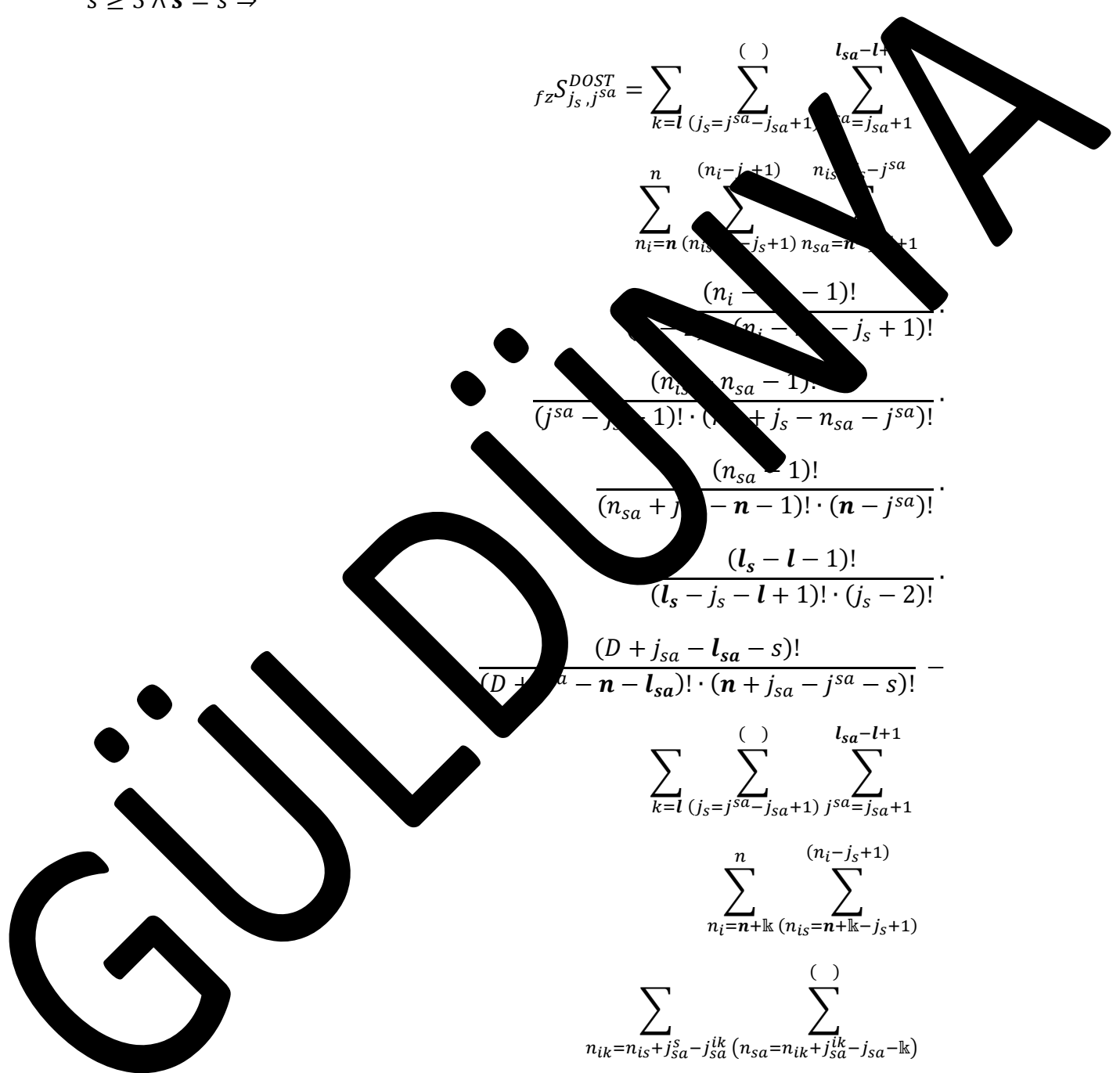
$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{n_{is}=n+l-k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n+l-k-j_s+1}^{n_{is}-j_{sa}} \frac{(n_i-j_s-1)!}{(n_i-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n+l-k-j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_s-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^s-s)!} \cdot \sum_{k=l}^{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_{sa}^a=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n+l-k}^n \sum_{n_{is}=n+l-k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l-k}^{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \frac{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-j_{sa}-j_s-s-l-k)!}{(n_{ik}+j_{sa}^s+j_{sa}^{ik}-n-j_{sa}-l-k-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_s^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{\binom{D}{j_s}} \sum_{j_s=j^{sa}-j_{sa}+1}^{\binom{D}{j_s}} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{n_{is}=n-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D}{j_s}} \sum_{j_s=j^{sa}-j_{sa}+1}^{\binom{D}{j_s}} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{sa})}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - l_{ik} \wedge l_i - j_{sa} - s > 0 \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{sa} \leq j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 2 \wedge s = s \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\quad)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j_{sa}=j^{sa}+1}^{l_{ik}+j_s-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{n_{is}=n+k-j_s+1}^{n_{is}=n+k-j_s+1} \sum_{n_{is}=n+k-j_s+1}^{n_{is}=n+k-j_s+1} \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - l_{sa} - l_{ik})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - l_{sa} - l_{ik} - j_s - s - l_{ik})! \cdot (n + j_{sa} - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l_s \neq l \wedge l_s < D - n + 1 \wedge$

$1 \leq i \leq j^{sa} - j_{sa} - 1 \wedge$

$i + j_{sa} - 1 \leq j^{sa} \leq n \wedge j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D - s - 1 \leq l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = l_{ik} = 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s \Rightarrow$

$$f_Z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \frac{(n_{is} + j^{sa} - n_{sa} - 1)!}{(n_{is} + j^{sa} - n_{sa} - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s - l - j_{sa} + 2)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_s-1)+j_s-j_{sa}} \sum_{n_i=n}^{(n_i - j_s + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa} - j_s + 1)} \frac{(n_i - l_s - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s - l - j_{sa} + 2)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(j_s-1)+j_s-j_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j^{sa}}^{OST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)!(n + j_{sa}^s - j_s)!} \cdot \frac{(l_s - 1)!}{(l_s + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_{ik} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_{sa} - j_{sa} - s = l_{sa} \wedge$
- $D + j_{sa} - n < l_{sa} - D + l_{ik} + j_{sa} - j_{sa}^{ik} \wedge$
- $D > n < n \wedge l_{ik} = 0 \wedge$
- $j_{sa}^{i_{sa}} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$
- $\{j_{sa}^s, j_{sa}^{i_{sa}}, \dots, j_{sa}^i\} \wedge$
- $s \geq 2 \wedge s = s$

$$f_z^{S_{j_s, j^{sa}}^{DOST}} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{i=0}^{(n_{is} - j_s + 1)} \sum_{j=0}^{(n_{sa} - j^{sa} + 1)}$$

$$\sum_{n_i=n_{is}-j_s+1}^n \sum_{n_{is}=n-j_s+1}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j_{sa}-l-s+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-l+1)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{l_{sa}^{ik} + 1} \sum_{j^{sa}=l_{ik} + j_{sa} - j_{sa}^{ik} + 2}^{j_{sa}^{ik} + 2}$$

$$\sum_{n_i=n-j_s+1}^n \sum_{n_{sa}=n-j^{sa}+1}^{n-j_s+1} \sum_{j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n - n_{sa} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s}^{S^D} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}} \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-}$$

$$\frac{(n_i - n_{is} - j_s - l + 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - j^{sa} - l + 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - l + 1)!} \cdot$$

$$\frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (j_s - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_{sa} - l - 1)!}{(n_{sa} - n_{sa} - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - n_{sa} - j_{sa} + 1)!}{(n_{sa} - n_{sa} - l + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$f_{z_{sa}^{POST}} = \sum_{k=l}^{a-j_{sa}+1} \sum_{(j_s=)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \sum_{n_i=n}^{n_i-j_s+1} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j^{sa}} \sum_{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$



$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_i-j_s+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}-n_{sa}-j^{sa})!} \cdot \frac{(n_{is}+j_s-j^{sa})!}{(n_{is}+j^{sa}-n_{sa}-1)! \cdot (n-j^{sa})!} \cdot \frac{(n_{is}-j_s+1)!}{(l_s-j_s-l+1-j_s-2)!} \cdot \frac{(n_{is}-l_s-j_s+1)!}{(n_{is}+j_{sa}-j^{sa}-1)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa})!}{(n_{is}+j_{sa}-l_{ik}-1)! \cdot (n+j_{sa}-j^{sa}-s)!} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}-1)}^{n_{is}+j_s-j^{sa}} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-l_k)!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-l_k-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-l_i)!}{(D+j^{sa}+s-n-l_i-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{\binom{l_{ik}+n-D-j_{sa}^{ik}}{j_s}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{\binom{l_{ik}+n-D-j_{sa}^{ik}}{j_s}} \sum_{j_{sa}=j_s+j_{sa}-1}^{\binom{l_{ik}+n-D-j_{sa}^{ik}}{j_s}} \sum_{n_i=n}^{\binom{n}{n_i=j_s+1}} \sum_{n_{is}=n-j_s+1}^{\binom{n}{n_i=j_s+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n}{n_i=j_s+1}} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(n_i - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{\binom{l_s-l+1}{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{\binom{l_s-l+1}{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}} \sum_{j_{sa}=j_s+j_{sa}-1}^{\binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_s}} \sum_{n_i=n}^{\binom{n}{n_i=j_s+1}} \sum_{n_{is}=n-j_s+1}^{\binom{n}{n_i=j_s+1}} \sum_{n_{sa}=n-j_{sa}+1}^{\binom{n}{n_i=j_s+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \sum_{k=l}^{\Delta} \sum_{i=1}^{\Delta} \sum_{j=1}^{\Delta} j^{sa} = j_s + j_{sa} - 1 \cdot \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}^{-lk})}^{(\quad)} \cdot \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} - j_{sa}^{-k} - n - j_{sa} - k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n - 1) \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j}^{SD} = \sum_{k=l}^{(j_s - l - 1)} \sum_{(j_s - 1)}^{(l_{ik} + 1 - l - j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{sa} + 1}^{(n - j_s + 1)} \sum_{n_i = n}^{(n_i - j_s)} \sum_{j_s = n - j_s + 1}^{(n_{is} + j_s - j^{sa})} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{is} + j_s - j^{sa})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = 2)}^{(l_{sa} - l + 1)} \sum_{j^{sa} = l_{ik} + j_{sa} - l - j_{sa}^{ik} + 2}$$

$$\begin{aligned}
& \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(l + j_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_s - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{i=(j_s-j_{sa}+1)}^{j_s} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{-lk})}^{( )} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - lk)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$j_{i_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_s-2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j_{sa}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_s-j_{sa}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa})}^{(n_i-j_s+1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)!(n + j_{sa}^s - j_s)!} \frac{(l_s - l - 1)!}{(l_s - l + 1) \cdot (j_s - 2)!} \frac{(D - n)!}{(D + j^{sa} + s - n - j_{sa})!(n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \right)$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^s \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^s)) \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(j_s - l_s - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

GÜLDÜMÜN



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1} \sum_{n_i = n + lk}^n \sum_{(n_{is} = n_{is} + lk - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{sa} - lk)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - lk)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - lk)!} \cdot \frac{(l_s - l - lk)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + n - l_i - j_s - s - lk)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} - (n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s = \dots)}^{l_s + j_s - l} \sum_{j_{sa} = l_i + n + j_{sa} - s}^{n} \frac{(n_i - j_s - n_{is} + j_s - j_{sa} + 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{n} \frac{(n_i - j_s + 1) \cdot (n_{is} + j_s - j_{sa})!}{n_i = n \cdot (n_{is} = n - j_s + 1) \cdot n_{sa} = n - j_{sa} + 1} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_s} \binom{l_s + j_{sa} - l}{j_s - l - k} \sum_{i=l_i}^{l_s + j_{sa} - l - k} \binom{l_s + j_{sa} - l - k}{i - l_i} \sum_{n_i=n+l_i}^{n+l_i+k-j_s+1} \binom{n+l_i+k-j_s+1}{n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \binom{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-lk}{n_{ik}+j_{sa}^s-j_{sa}^{ik}-n+l_i-k-j_{sa}^s}$$

$$\frac{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - n + l_i - k - j_{sa}^s)!}{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - n + l_i - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D > n < n) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$+ j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$S_{j_s, j^{sa}}^{DOS1} = \sum_{k=l}^{j^{sa}-j_{sa}+1} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\begin{aligned}
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜŞMÜŞ

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s = 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s \leq j_s - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq j_s - 1 = s \Rightarrow$$

$$fz_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n} \sum_{(n_i=n)}^{(n_i-j_s+1)} \sum_{(n_{is}=n-j_s+1)}^{n_{is}+j_s-j^{sa}} \sum_{(n_{sa}=n-j^{sa}+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l_s-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_s-l+1} \sum_{n_i=0}^n \sum_{n_{is}=n-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_s-l+1)}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$



$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 3 \wedge s = s \Rightarrow$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}}^{n_{is}+j_s-j^{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + j_s - j^{sa} - l)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
 &\frac{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 &\sum_{n_i=n}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=} \sum_{(n_{sa}=)} \sum_{(j_{sa}^{ik}-j_{sa}-k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s) \cdot (n + j_{sa}^s - s - j_s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s) \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D > n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{K} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j_{sa}}^{SOST} = \left( \sum_{k=1}^{( )} \sum_{l=1}^{( )} \sum_{j_{sa}=j_{sa}} \right.$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) +$$

$$\left( \sum_{k=1}^{( )} \sum_{l=1}^{( )} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \right)$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} + 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_i - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=0}^{(n)} \sum_{l=0}^{(n)} \sum_{a=j_{sa}}$$

$$\sum_{n_i=n+l}^{(n)} \sum_{(n_{sa}=n_i+j_{sa}-j^{sa}-l+1)}^{(n_i-j^{sa}+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}$$

$$\frac{(n_{ik} + j_{sa}^{ik} - j_{sa} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!}{(n_{ik} + j_{sa}^{ik} - j_{sa} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j^{sa} - j_{sa} \wedge$$

$$l_i + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq n - l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l_i = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=i}^{(\cdot)} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_{sa} + j^{sa})!} \cdot \frac{(D + j_s - l_{sa} - s)!}{(D + j_{sa} - n - 1)! \cdot (n - s)!} \sum_{k=i}^{(\cdot)} \sum_{(j_s=1)} \sum_{j^{sa}=j_{sa}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{(n_{ik}+j_{sa}-j_{sa}^{ik}+1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = \cdot l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = \cdot l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s \Rightarrow$$

$$fz_{j_s, j^{sa}}^{S_{DOST}} = \sum_{k=i}^{l} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_i - j^{sa})!}$$

$$\frac{(l_{sa} - i^{l+1} - j_{sa} + 1)!}{(l_{sa} - i^{l+1} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=i}^{l} \sum_{(j_s=1)}^{l_{sa}-i^{l+1}} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{(n_i-j^{sa}+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_i-j^{sa}+1)}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s > D - 1 + 1 \wedge$

$2 \leq l_s \wedge D + l_s - n - l_{sa} \wedge$

$2 \leq j_s \leq j_s - j_{sa} \wedge$

$j_s + j_{sa}^a \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$



$$s: \{j_{sa}^s, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j_{sa}^{sa}}} = \left( \sum_{k=l} \sum_{(j_s = j_{sa}^{sa} - j_{sa} + 1)} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\ \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - l_k} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(j_{sa} - j_{sa})} \sum_{j_{sa} = l_{sa} + n - D}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \right. \\ \sum_{n_i = n + l_k}^n \sum_{(n_{is} = n + l_k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - l_k} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right)$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{sa}-l_k)}^{n_{is}-j_s-j_{sa}-l_k}$$

$$\frac{(n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(j_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Big) -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DO} = \sum_{k=l}^{l-j_{sa}^{ik}+2} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(n_i=n+l_k)} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)!} \cdot \frac{(l_s - l - l_k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l_s > D - n + l_i \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_i \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa} - j_s - l_{ik} \wedge$
- $D \geq n < n \wedge l = l_k \geq l_i \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$
- $s: \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^l\} \wedge$
- $s \geq 3 \wedge s = j_{sa}^i + l_k \wedge$
- $l_k \geq 1 \Rightarrow$

$$fz S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa}+n_{sa}-j_{sa})} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{is}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \left( \sum_{k=l} \sum_{(j_s = j_{sa} - j_{sa} + 1)} \sum_{j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \sum_{n_i = n + k} \sum_{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l} \sum_{(j_s = l_s + n - D)} \sum_{j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \sum_{n_i = n + k} \sum_{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l_s+n-j^{sa}}^{l_s+l-1} \sum_{i_s=l_s+n-j^{sa}-k}^{i_s+l-1} \frac{(i_s - i_s + 1)! \cdot (n_{is} + j_s - j^{sa} - k)!}{(j_s - i_s + 1)! \cdot (n_{is} + j_s - j^{sa} - k)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - i_s + 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{j^{sa}=j^{sa}-j_{sa}+1}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - lk)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + 1 \wedge$$

$$lk : z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_s + j^{sa} - j_{sa} + 1}} \sum_{j^{sa} = l_i + n + j_{sa} - D - s}^{n} \sum_{n_i = n + k - j_s + 1}^{n} \sum_{n_{is} = n + k - j_s + 1}^{n} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k}^{n} \frac{(n_{ik} + j_{sa}^{is} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{is} + j_{sa}^{ik} - j_{sa} - k - j_s - s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_{sa}^{is} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D > n < n \wedge l > D - j_s + 1 \wedge$
- $2 \leq l \leq D + l_s + j_s - n - 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j^{sa} < n + j_s - s \wedge$
- $l_i + j_{sa} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$
- $D \geq n < n \wedge l = k \geq 0 \wedge$
- $j_{sa} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$
- $s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 3 \wedge s = s + k \wedge$
- $k_z: z = 1 \Rightarrow$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{ik}+n-D-j_s)} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_s)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} + j^{sa})!} \cdot \\
 & \frac{(n - j^{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l + 1)!}{(l_s - l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(l_s + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - l - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} = j_{sa} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}, j_{sa}, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\left( \sum_{k=l}^{(j^{sa} - j_s - D)} \sum_{j^{sa}=l_{sa}+k}^{l_s+l-k-1} \right)$$

$$\sum_{n_i=n+l_k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{n_{is}+j_s-j^{sa}-k} \sum_{n_{sa}=n-j^{sa}+1}^{j^{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{k=l}^{( )} \sum_{j_s = j_s - j_{sa} + 1}^{( )} \sum_{l_s + j_{sa} - l}^{( )} \sum_{n_{is} = n_{is} - D - s}^{( )} \sum_{n_i = n_i + 1}^{(n_i - j_s + 1)} \sum_{n_{is} = n_{is} + k - j_s + 1}^{( )}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{( )} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k}^{( )}$$

$$\frac{(n_{ik} + j^{sa})^{j_{sa}^{ik} - j_{sa} - j_s - s - k}!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - 1)^{j_{sa} - k - j_{sa}^s}! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n + 1) \wedge (n_{is} = n + 1) \wedge$$

$$D + l_s + j_s - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq n - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned} S_{j_s, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_s-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\ &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-k} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{\binom{l_s+j_{sa}-l}{j^{sa}=l_i+n+j_{sa}-D-s}}$$

$$\sum_{n_i=n+l_k} \sum_{\binom{n}{n_i+l_k}} \sum_{\binom{(n_i-j_s+1)}{n_i+l_k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-l_k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s - l - 1)} \sum_{j_s=l_s+n-D-j_{sa}+k}^{(l_s - l - 1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_s - l - 1)} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \right) \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l)} \sum_{n_i=n+k}^{(n_{sa}+n_{is}-k+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(l_{sa}-l+k)} \sum_{n_{is}=n_{is}+j_s-j^{sa}-k}^{(j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \Bigg) -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k}}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D}^{l_{sa}-l+1} \sum_{n_i=n}^n \sum_{n_{i+1}=n+j_s+1}^{(j_s+1)} \sum_{n_{ik}=n}^{( )} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-lk}^{( )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - s - l_{sa})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \frac{(D + j_{sa} - l_i)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \geq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + j_{sa}^{ik} + 1 = l_s \wedge n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$n_{ik} \geq n < n_{sa} \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq l_i - 1 \wedge j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^i > 3 \wedge j_{sa}^i + s + lk \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i - 1)!}{(D + j^{sa} - n - l_i - j_{sa} - s)! \cdot (n + j_{sa} - s - j_s)!}$$

$$\sum_{k=l}^{(j_s)} \sum_{(j_{sa}+1)}^{(j_s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(j_s)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(j_s)}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \sum_{k=l}^{\binom{()}{j_s=j_{sa}^i-j_{sa}+1}} \sum_{j_{sa}=l_s+l}^{l_s+j_{sa}-l} \sum_{i_{sa}=D-1}^{j_{sa}-D-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n-\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-\mathbb{k}-j_s+1}^{n_{is}+j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - j_s + 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

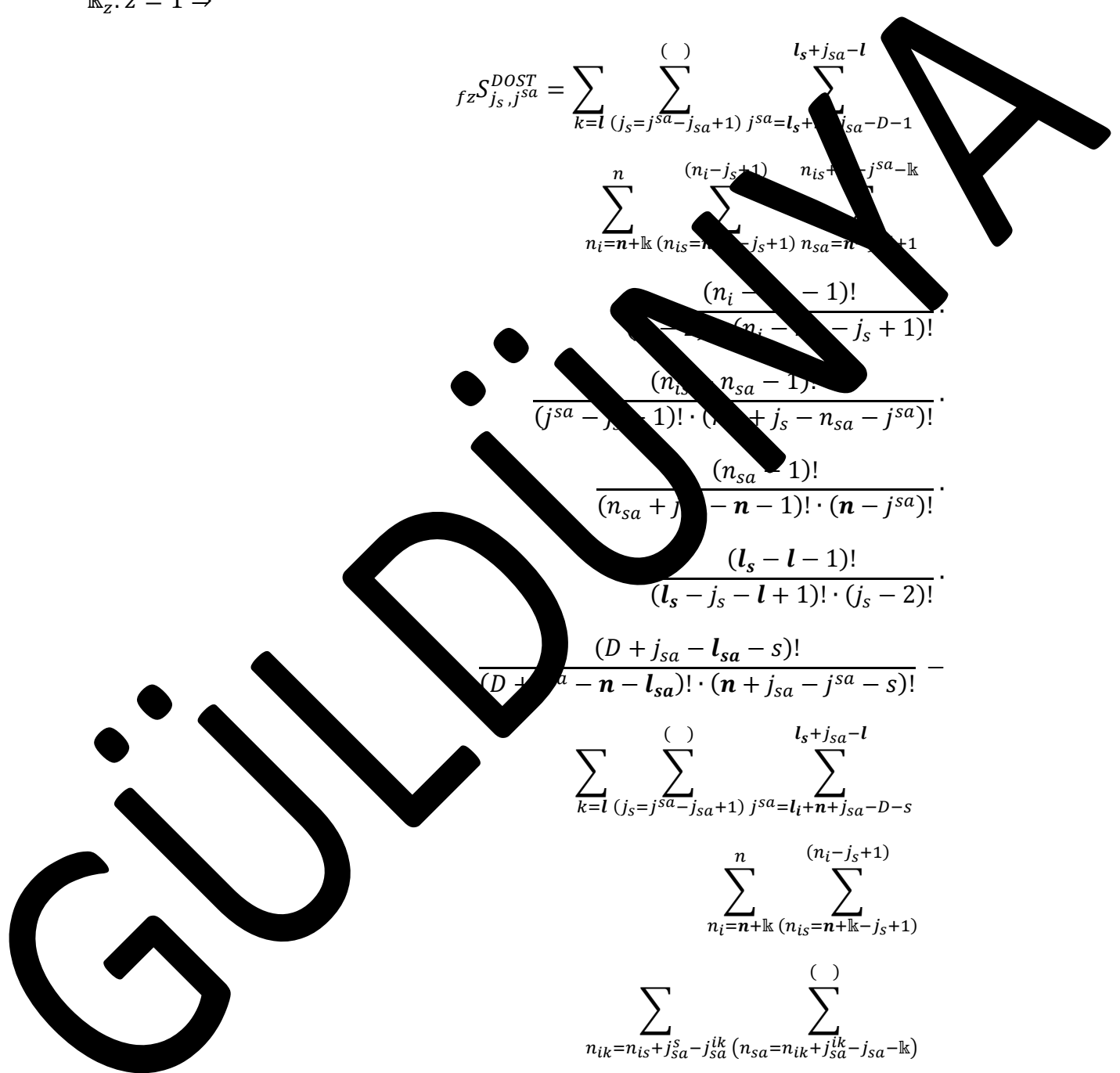
$$\sum_{k=l}^{\binom{()}{j_s=j_{sa}^i-j_{sa}+1}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{\binom{()}{j_s=j_{sa}^i-j_{sa}+1}}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{POST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_{sa}-D-j_{sa}+1)}^{(l_{sa}-l-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{sa}-l-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = \mathbb{k} \wedge$$

$$\mathbb{k}_z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1) \wedge j^{sa} = j_{sa} - 1} \sum_{n_i = n - l_i}^n \sum_{n_{is} = n + l_k - j_s + 1}^{n - l_i} \sum_{n_{ik} = n_i + j_{sa}^s - j_s}^{n - l_i} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - l_k}^{n - l_i} \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge l_i > D - l_i + 1 \wedge$

$2 \leq i \leq j^{sa} - j_{sa} - 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D > n > l_i \wedge I = l_k \geq 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s: \{j_{sa}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + l_k \wedge$

$l_k: z = 1 \Rightarrow$

$$\begin{aligned}
f_{zS}^{DOST} = & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - j^{sa} - l_s - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(\quad)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_{sa}-j_{sa}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}^{ik}-s)}^{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{is}+j_s-j_{sa}-1)}$$

$$\frac{(j_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{is}+j_s-j_{sa}-k)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{n} \sum_{j_s = j_s - j_{sa} + 1}^{j_s} \sum_{l_i = l_i - j_{sa} - D - s}^{l_i} \sum_{n_i = n_i}^{n_i} \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{n_{ik} + j_{sa}^s} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}^{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}$$

$$\frac{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^s - j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{S_{j_s, j^{sa}}} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_i+j_{sa}-l-s+1} j^{sa}=l_i+n+j_{sa}-D-s$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} j^{sa}=j_s+j_{sa}-1$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

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$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)}^{j_{sa} = j_{sa} - 1} \sum_{n_i = n - k}^n \sum_{n_{is} = n + k - j_s + 1}^{n - k} \sum_{n_{ik} = n_i + j_{sa}^s - j_s}^{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k} \frac{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j_{sa} - k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_{sa} - l_i - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n < n \wedge n > D - l_i + 1 \wedge$$

$$2 \leq i \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - n \leq l_i \wedge I = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{)}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n_{ik}+j_{sa}-lk}^{\binom{)}{n_{sa}=n_{ik}+j_{sa}-lk}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i_{ik} - j_s - s - lk)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - lk)!} \cdot \frac{(l_s - l - lk)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - lk)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge l_s \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + j_{sa}^{ik} \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l_i = l_i \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, lk, j_{sa}^{sa}, j_{sa}^i\} \wedge$$

$$s > n = s + lk \wedge$$

$$lk_z: z = 1 =$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{\binom{)}{j_s=l_s+n-D}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{is}+j_s-j^{sa}-lk}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}^{ik}+1} \cdot \sum_{(j_s=n+l_k-j_s+1)}^n \sum_{(i=j_s+1)}^{(i-j_s+1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{is}+j_s-j^{sa}-l_k} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}^{ik}+1}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l = l_k = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{l_s} - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_s^s, j_{sa}^s, \dots, j_s^s\}$$

$$s \geq 3 \wedge s = s + l_k \wedge$$

$$k; z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{l=1}^{(l_{ik}-l-j_{sa}^{ik})} \sum_{(j_s=j_s+1)}^{(l_{ik}-l-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+l)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik})! (n + j_{sa}^{ik} - j_s)!} \cdot \frac{(l_s - 1)!}{(l_s - l + 1) \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\{j_{sa}^1, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n_{ik} + j_s + 1)}^{(n_i - j_s + 1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})!} \cdot \frac{(l_s - l - \mathbb{k})!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge \\ & D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s = l_s + n - D)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + \dots}^{j_{sa} - D - s} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_{sa} - l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!}$$

$$\sum_{k=l}^{(l_s - l - 1)} \sum_{(j_s = j_s^{sa} + 1) \wedge j^{sa} = l_{sa} + 1}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1) \wedge (n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s^{ik}} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k)}$$

$$\frac{(n_{ik} + j_{sa}^{ik} + j_s^{ik} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - k - j_{sa})! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - n < n \wedge l_s > l_s - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D - n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 & \sum_{j_s=l_s+n}^{n-l_s+l_s+l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{n-l_s+l_s+l-s+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-l-s+1}
 \end{aligned}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$\sum_{(i_s=l)}^{(l+1)} \sum_{(n_{sa}=D-j_{sa}+1)}^{(l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

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$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{s-1} = 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
fz_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_s - l_s - 1)!}{(l_s - l_s - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
&\frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
&\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
&\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
&\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
&\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
&\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}-k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{n_{is}+j_s-j^{sa}-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}-n_{sa}-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{(n-j_s+1)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-1)! \cdot (n_{sa}+1)!} \cdot \frac{(n_{is}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+1-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOS} = \left( \sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+2} \right. \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(j_s + j^{sa} - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}^{(n_{sa}-n_{ik}+j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l - l_k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D + j_{sa} - n$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq j_s + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + l_k \leq l_s \wedge l_{sa} - j_{sa} - j_{sa}^{ik} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, l_k, j_{sa}^s, j_{sa}^i\} \wedge$$

$$s \geq j_s \wedge s = s + l_k \wedge$$

$$l_k: z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left( \frac{(D - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{(j_s=2)}^{(n_i-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_{sa}-j_{sa}^{ik})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)!} \frac{(n + j_{sa}^s - j_s)!}{(l_s - l - 1)!} \frac{(l_s - l + 1)!}{(j_s - 2)!} \frac{(D - 1)!}{(D + j^{sa} + s - n - j_{sa})!} \frac{(n + j_{sa} - j^{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} >$$

$$D - j_{sa} - n \leq l \leq D + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_s^s - k, j_{sa}^s, \dots, i\}$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k; z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j^{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(j_s-2)} \sum_{(j_s=2)}^{(j_s-2)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{(j_s=2)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{s_a}=n-j^{s_a}+1}^{n_{i_s}+j_s-j^{s_a}-l_k} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{s_a} - 1)!}{(j^{s_a} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{s_a} - j^{s_a} + 1)!} \cdot \\
& \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - n - 1)! \cdot (n - j^{s_a})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{s_a} + 1)!}{(l + l_{s_a} - j^{s_a} - l_s)! \cdot (n - j_s - j_{s_a} + 1)!} \cdot \\
& \left( \frac{(D + j_{s_a} - n - s)!}{(D + j^{s_a} - n - s)! \cdot (n - j_{s_a} - j^{s_a} - s)!} \right) \cdot \\
& \sum_{k=0}^{l_{i_k}} \sum_{(n_{i_k}=n+l_k-j_s+1)}^{l_{i_k}+j_{s_a}-l-j_{s_a}^{i_k}+1} \sum_{j^{s_a}=l_i+n+j_{s_a}-D-s} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{i_k}=n_{i_s}+j_{s_a}^s-j_{s_a}^{i_k}} \sum_{(n_{s_a}=n_{i_k}+j_{s_a}^{i_k}-j_{s_a}-l_k)}^{( )} \\
& \frac{(n_{i_k} + j^{s_a} + j_{s_a}^{i_k} - j_{s_a} - j_s - s - l_k)!}{(n_{i_k} + j^{s_a} + j_{s_a}^{i_k} - n - j_{s_a} - l_k - j_{s_a}^s)! \cdot (n + j_{s_a}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{s_a} + s - n - l_i - j_{s_a})! \cdot (n + j_{s_a} - j^{s_a} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{s_a} - n - l_{s_a} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{s_a} - j_{s_a} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^{(n_i-i_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+n-D} \frac{(n_i - n_{is} - 1)!}{(i - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_s - l - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-lk}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - lk)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - lk - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = lk \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1$$

$$s: \{j_{sa}^s, lk, j_{sa}, \dots, j_s\} \wedge$$

$$s - 3 \wedge s = n + lk \wedge$$

$$lk_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-lk} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+n-D}^{(l_{sa}-l+1)} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{(l_{sa}-l+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{is}+j_s-j^{sa}-l_k)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik} - l - j_{sa}^k)} \sum_{j_s=l_i+n-l_{sa}+1}^{n} \sum_{j_{sa}=j_s+j_{sa}^k}^{n} \sum_{n_i=n+l_k}^{(n_i - j_s + 1)} \sum_{n_{is}=n+l_k}^{(n_{is} - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^k}^{(n_{sa} - n_{ik} + j_{sa}^{lk} - j_{sa} - l_k)} \frac{(n_{ik} + j_{sa}^k + j_{sa}^k - l_{sa} - l - j_s - s - l_k)!}{(n_{ik} + j_{sa}^k + j_{sa}^k - l_{sa} - l - j_s - l_k - j_{sa}^k)! \cdot (n + j_{sa}^k - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - n + j_{sa} - l_{sa} \wedge$$

$$1 \leq j_s \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

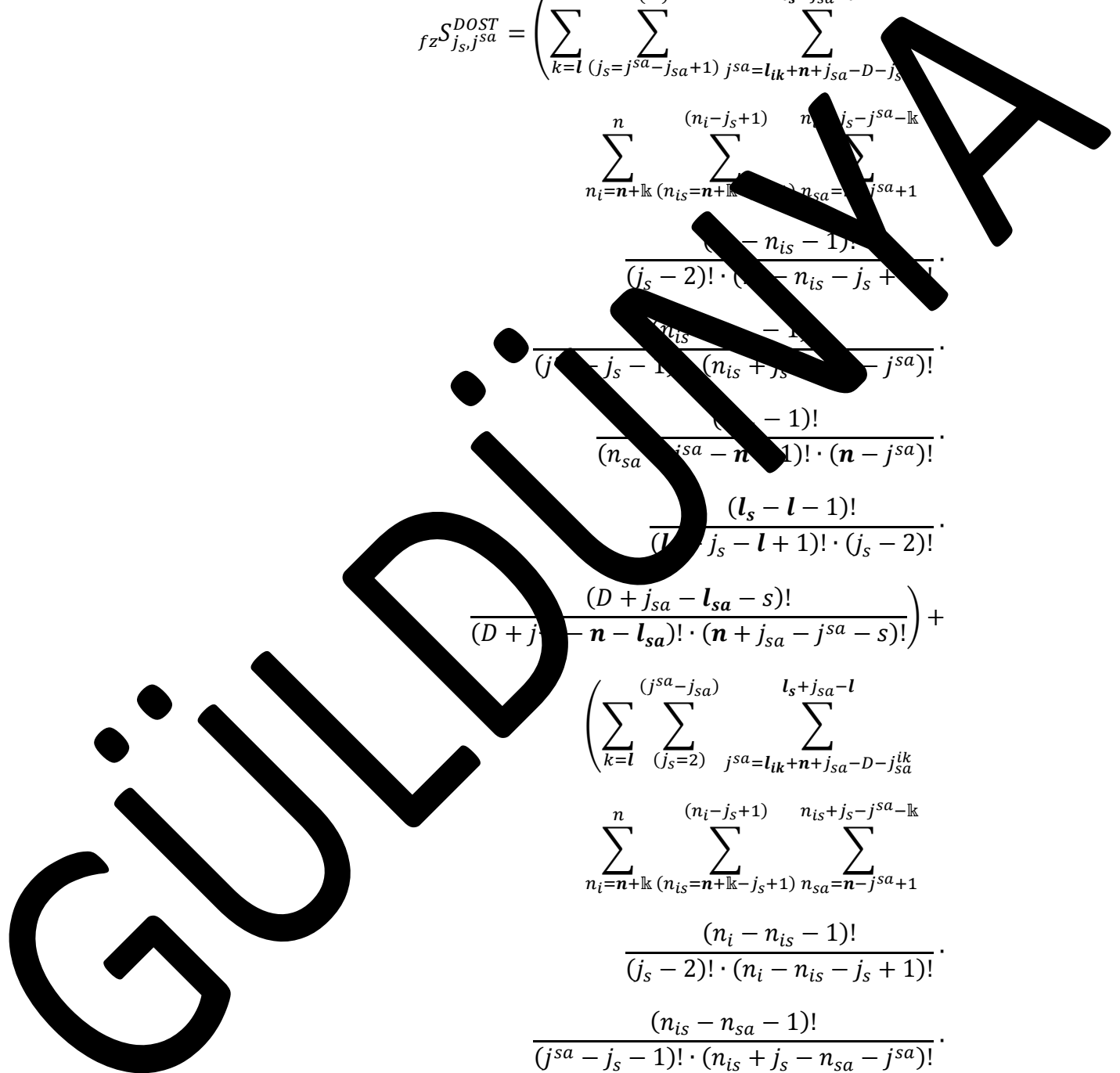
$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + k \wedge$

$k_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{(j_s=j^{sa}-j_{sa}+1)}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_s}^{l_s+j_{sa}-l} \right. \\ \left. \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+k)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{\binom{(j^{sa}-j_{sa})}{(j_s=2)}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \right. \\ \left. \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+k-j_s+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right)$$



$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s)}^{n_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - j^{sa})!}$$

$$\frac{(n_{is} - 1)!}{(n_{sa} - j^{sa} - n_{is} - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(D + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_a^D = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{n_{is} + j_s - j^{sa} - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n_{ik}+j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \cdot \frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq -n + 1$
- $2 \leq l \leq D + l_s + j_{sa} - n - 1 \wedge$
- $1 \leq j_s \leq j^{sa} - j_s \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s + l_{sa} + j_{sa} - j_s - l_{ik} \wedge$
- $D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D \geq n < n - l = \mathbb{k} \geq 1 \wedge$
- $j_{sa} - j_s - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$
- $s: \{j_{sa}^s, \mathbb{k}, j_s^1, \dots, j_{sa}^l\} \wedge$
- $s + \mathbb{k} = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
 & \left( \sum_{k=l}^{n-D-j_s} \sum_{(j_s=j_s)}^{l_{ik}+j_{sa}-l-j_{sa}^{lk}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{lk}} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} + j^{sa})!} \cdot \\
 & \frac{(n - j^{sa} - 1)!}{(n + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l - j_s + 1)!}{(l_s - l - j_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D > n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - 1)!}{(l_s - l_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 \leq l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} j^{sa} = j_s + j_{sa} - 1$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik} + j_{sa} - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - j_{sa} - j_{sa}^{ik} - j_{sa} - j_s - s)!} \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{\binom{n_i - j_s + 1}{j_s - 2}} \sum_{j_s = j^{sa} - j_{sa} + 1}^{\binom{n_{is} + j_s - j^{sa} - k}{n_{is} = n + k - j_s + 1}} \sum_{j^{sa} = j_{sa} + 1}^{\binom{l_s + j_{sa} - l}{n_{sa} = n - j^{sa} + 1}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l}^{\binom{j^{sa} - j_{sa}}{j_s = 2}} \sum_{j_s = 2}^{\binom{l_s + j_{sa} - l}{j^{sa} = j_{sa} + 2}} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{s} + j_{sa} - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - n)!}{(D + j^{sa} + s - n - j_{sa} - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n) \vee$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{l=1}^{(l_s-1)} \sum_{(j_s=2)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!}$$

$$\frac{(l + j_{sa} - s)!}{(D + j^{sa} - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$\sum_{l=1}^{(l_s-l+1)} \sum_{(j_s=2)}^{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{s-1} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{l_s+j_{sa}-l}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l} \sum_{(j_s=2)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right) + \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(j^{sa} - l_s - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

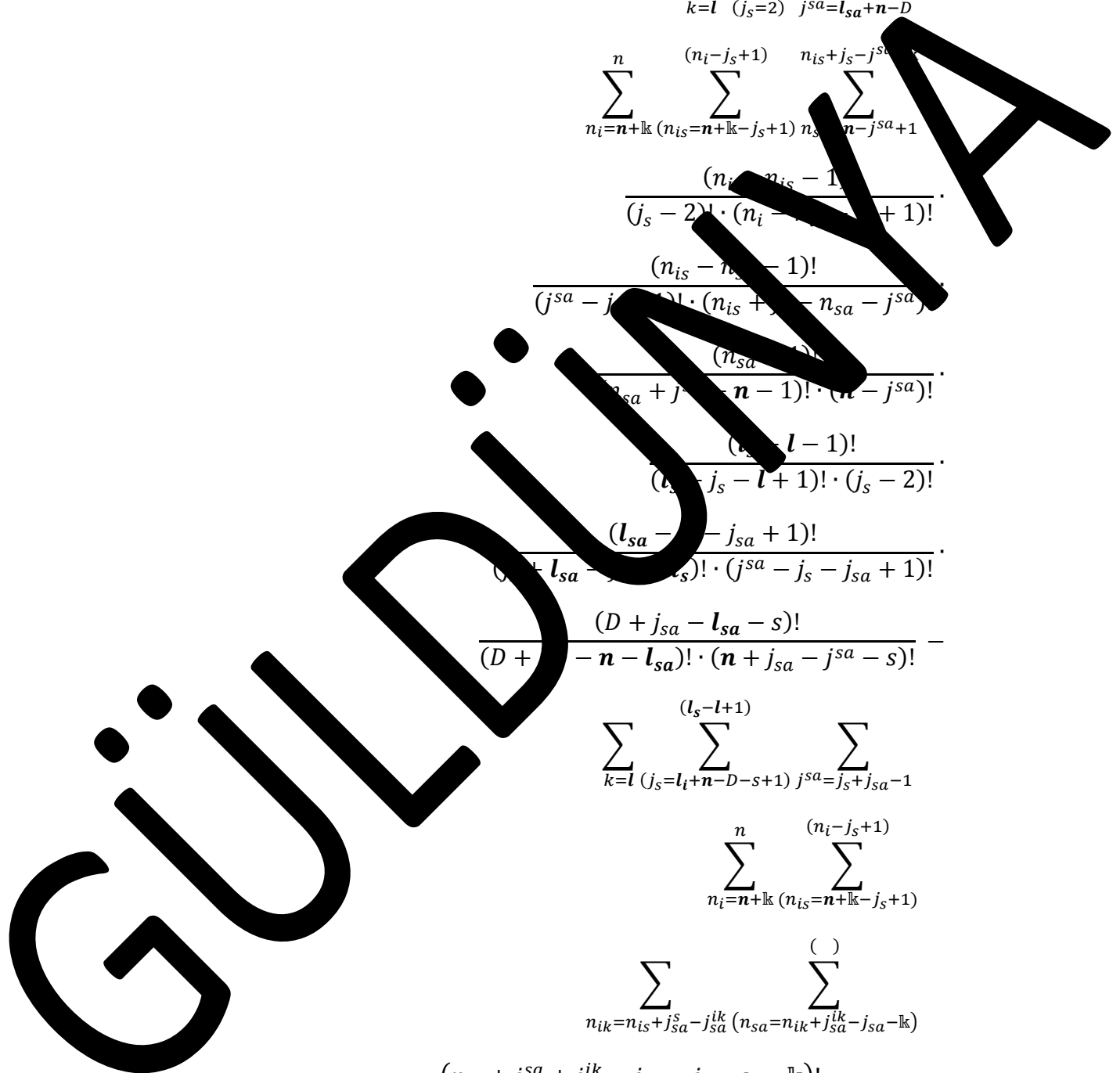
$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$





$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} + j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{\mathcal{S}_{j_s, j^{sa}}} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-k+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_{sa}-1}^{(l_s-l+1)} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ \left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{j_s+j_{sa}} j_s^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+l_k}^{i_{sa}-l_k} i_{sa}^{n_{is}-1} \\
 & \frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - j_s - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{j_s} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}
 \end{aligned}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{j_s} S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(\ )} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^s}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^s-\mathbb{k})}^{( )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!} \cdot \frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^s - n - l_i - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq -n + 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s$$

$$l_s - j_{sa}^{ik} + j_{sa}^{ik} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - j_{sa} - s - \mathbb{k} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 1 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = j_{sa}^i + \mathbb{k} \wedge$$

$$\mathbb{k} \geq 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_s - 1)!}{(D + j^{sa} - n - 1)! \cdot (n - j^{sa} - s)!} \cdot \\
& \sum_{k=l}^{\binom{D-l_s-1}{j_s-j_s+1}} \sum_{j_s=j_s+1}^{\binom{D-l_s-1}{j_s+1}} \sum_{j_s=l_i+n+j_{sa}-D-s}^{l_{sa}-1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{D-l_s-1}{n_{sa}-n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{s} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

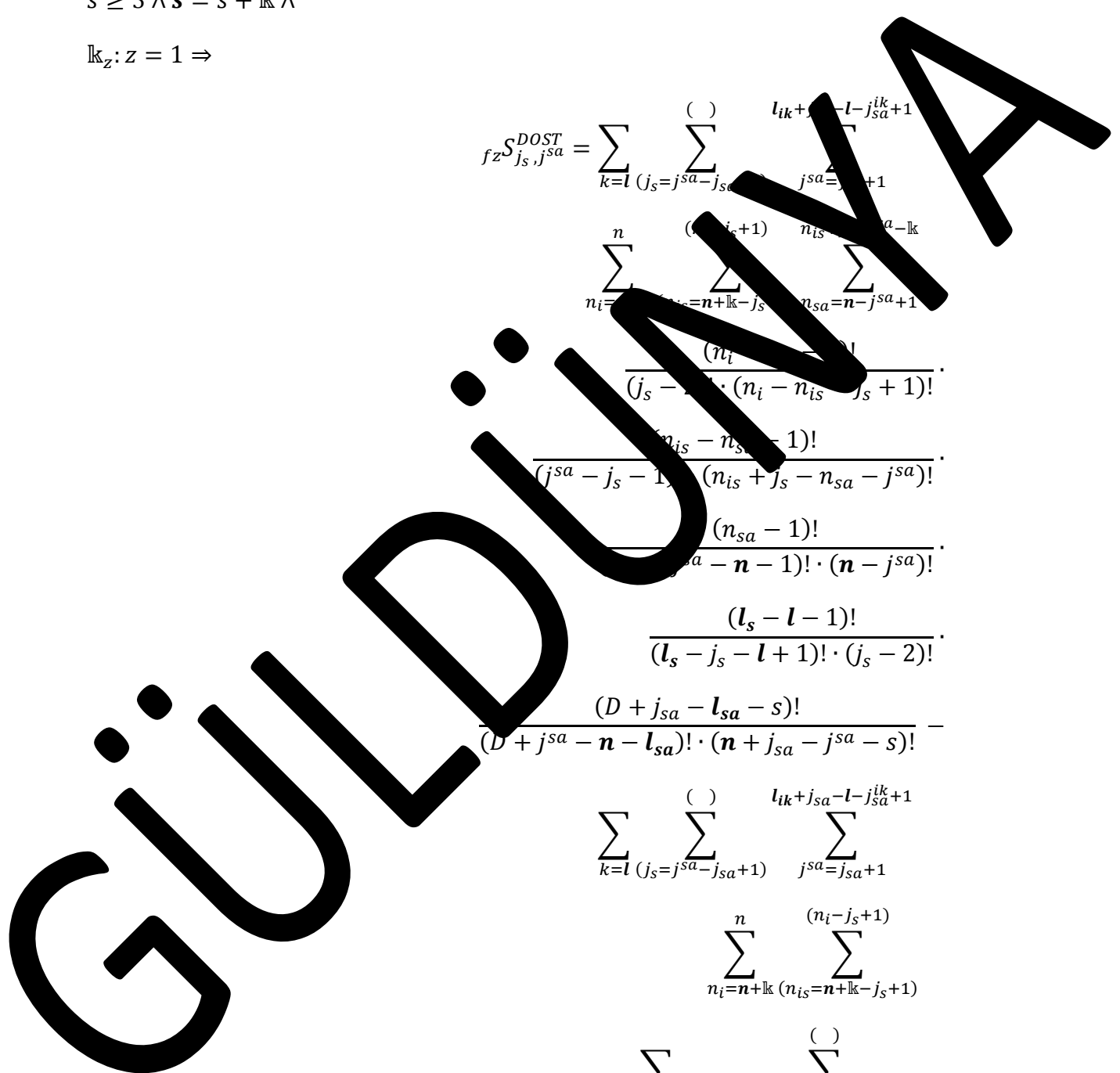
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j_{sa}^a-j_{sa})} \sum_{(j_{sa}=j_{sa}^a+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^a+1} \cdot \sum_{n_i=n+l_{ik}-j_s}^n \sum_{(n_{is}=n+l_{ik}-j_s)} \sum_{(n_{sa}=n-j_{sa}^a+1)} \binom{n_i}{j_s-1} \cdot \frac{(n_i-n_{is}+1)!}{(n_i-n_{is}+j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j_{sa}-j_s-1) \cdot (n_{is}+j_s-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=l} \sum_{(j_s=j_{sa}^a-j_{sa}+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^a+1} \cdot \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)} \binom{n_i-j_s+1}{n_{is}=n+l_{ik}-j_s+1} \cdot \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \binom{}{n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k}} \cdot \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}-s-j_s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s}^{l_i} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-k}^{n_{is}+j_s-j^{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$



$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(n_i-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa})! (n + j_{sa}^{sa} - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1) \cdot (j_s - 2)!} \cdot \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})! (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq n + s - n \wedge$$

$$D \geq n < n \wedge k \geq 0$$

$$j_{sa}^{sa} - j_{sa}^{i} - 1 \wedge j_{sa}^{s} - j_{sa}^{i} - 1$$

$$\{j_{sa}^s, k, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s$$

$$k_z \cdot z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_s - s)!} \cdot \sum_{n_i = n + k}^{n_{is} = n + k - j_s + 1} \sum_{n_{is} = n + k - j_s + 1}^{n_{is} = n + k - j_s + 1} \sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k} \frac{(n_{ik} + j^{sa})! \cdot (j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{is}+j_s-1)}^{(n_{is}-j_{sa}-\mathbb{k})} \frac{(n_{is}-j_{sa}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-j_{sa})!} \cdot \frac{(n_{sa}-j_{sa}-n-1)! \cdot (n-j_{sa})!}{(n_{sa}-j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{is}+j_s-1)}^{(n_{is}-j_{sa}-\mathbb{k})} \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_s^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j}^L = \sum_{i=1}^{(j - j_{sa} + 1)} \sum_{\substack{l_i=1 \\ l_i \neq 2}}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_i + n + j_{sa} - D - s} \sum_{n_i = n + k}^n \sum_{\substack{(n_i - j_s + 1) \\ (n_{is} = n + k - j_s + 1)}} \sum_{\substack{(n_{is} + j_s - j^{sa} - k) \\ (n_{sa} = n - j^{sa} + 1)}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} + j^{sa})!} \cdot \\
 & \frac{(n - n_{sa} - 1)!}{(n_i + j^{sa} - n_{sa} - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - l_i - l + 1)! \cdot (l_s - 2)!} \cdot \\
 & \frac{(l_s - l - j_s + 1)!}{(l_s + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(j^{sa} - j_s - l_{sa} - 1)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, D}} = \sum_{k=l}^n \sum_{(j_s)}^{(j_s+1)} l_{ik} \dots^{l-j_{sa}^{ik}+1} \dots^{j_{sa}=l_{sa}+n-D}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i)}^{(n_i-j_s+1)} \sum_{(n_i+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} + 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j_{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(i=j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+n-j_{sa}-D-s} \sum_{j_s=1}^{l_i+n-j_{sa}-D-s} \frac{(l_i+n-j_{sa}-s)!}{(j_s-1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - l_s - 1)!}{(n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} j_{sa}^{sa+1}$$



$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \sum_{k=0}^{l - j_{sa}^{ik} + 2} \sum_{l_i = l_i + n - D + k + 1}^{n - l_i + n - D + k + 1} \sum_{j^{sa} = j_s + j_{sa} - 1}^{n} \sum_{n_i = n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_{is} - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{sa}^{lk} - j_{sa} - \mathbb{k})}^{(n_{sa} = n_{ik} + j_{sa}^{lk} - j_{sa} - \mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - n - j_{sa} - \mathbb{k} - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n - l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 - j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$

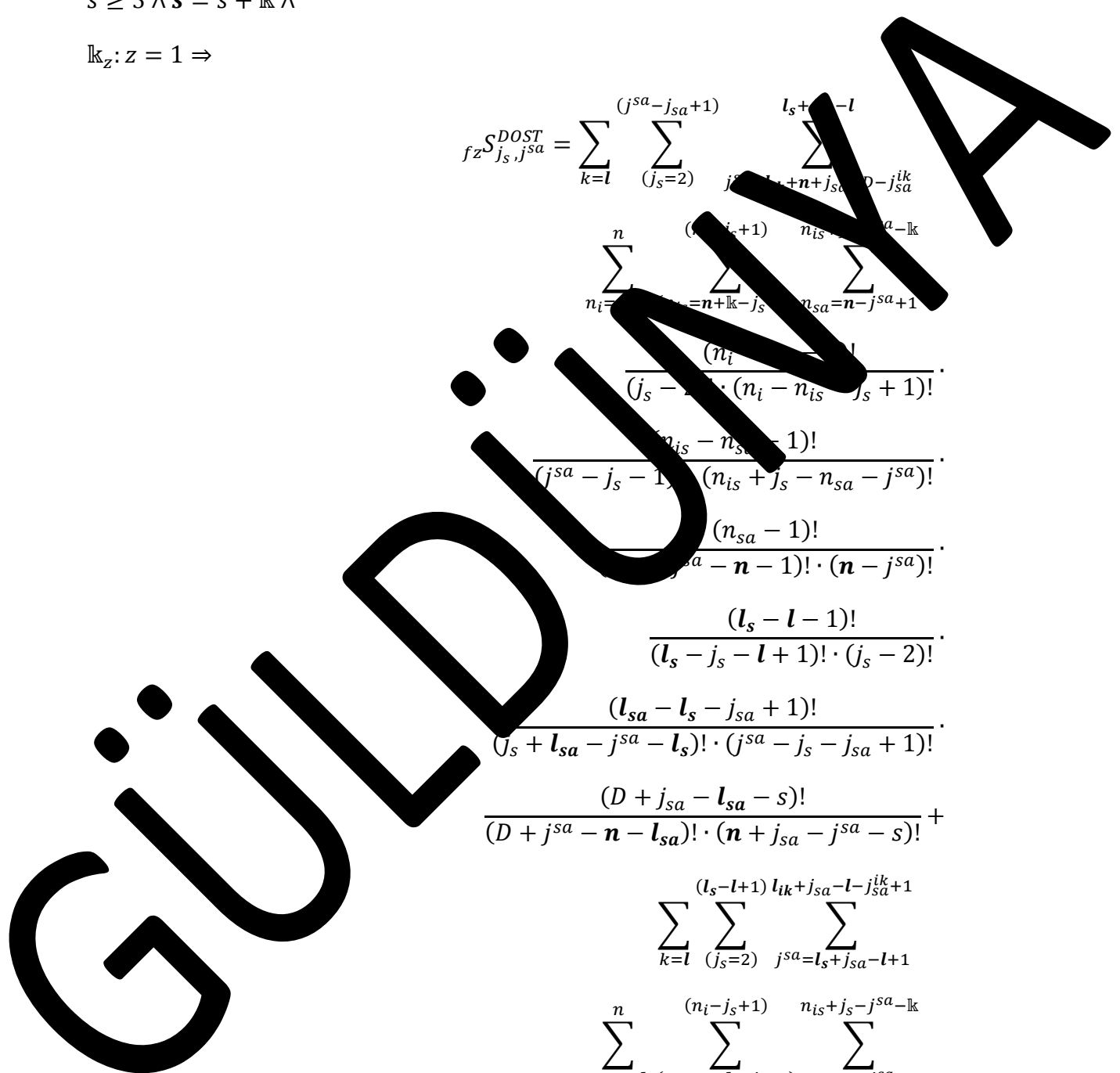
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$f_z^{SDOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+l-1} \sum_{j_{sa}=l_s+j_{sa}-l}^{D-j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-k}^{\binom{()}{j_{sa}=l_{ik}+n+j_{sa}-D-k}} \sum_{n_i=n+k}^{\binom{()}{n_i=n+k}} \sum_{n_{is}=n+k}^{\binom{()}{n_{is}=n+k}} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{\binom{()}{n_{ik}=n_{is}+j_{sa}^{ik}}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k}^{\binom{()}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k}} \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_s - s - k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_s - s - k - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_{sa} < n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

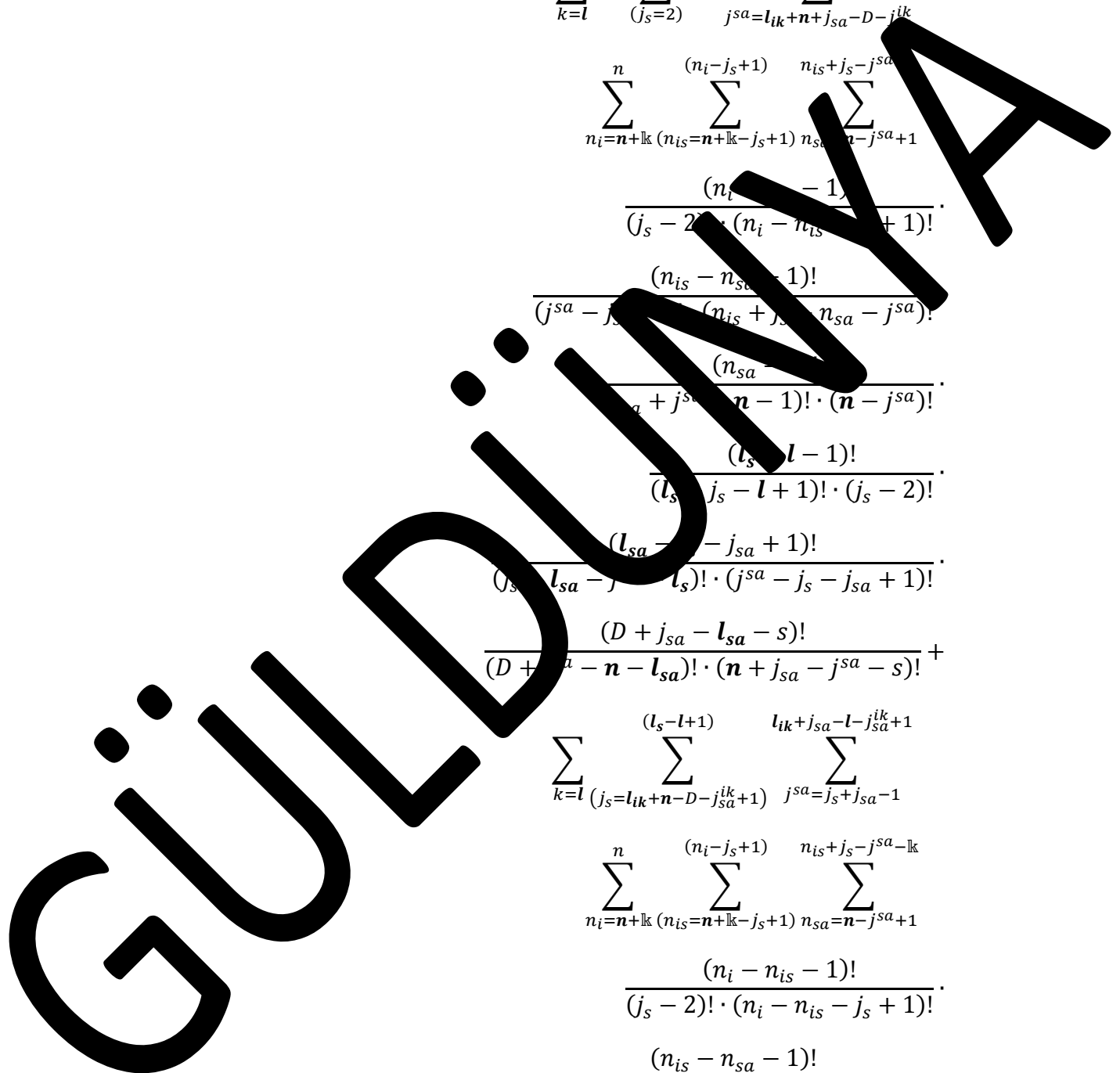
$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{n_{is}+j_s-j^{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s - l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{ik}+1)}^{j^{sa}=j_{sa}-1} \sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^n \dots$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^n \dots$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}}^n \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^n \dots$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n_{sa} - j_{sa} - l_k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n + l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n + l \neq l_i) \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j_{sa}}^{SDOST} = \sum_{k=l}^{(j_{sa}-j_{sa}+1) l_{ik}+l-j_{sa}^k+1} \sum_{(j_s=2)}^{j_{sa}=j_{sa}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i+1)}^{n_{is}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^k+2} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa})!}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D+l_{sa}-j_{sa}-s}{j_s+j_{sa}-j^{sa}-l_s}} \sum_{j^{sa}=j_{sa}+1}^{\binom{D+l_{sa}-j_{sa}-s}{j_s+j_{sa}-j^{sa}-l_s}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s}^n \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{\binom{D+l_{sa}-j_{sa}-s}{j_s+j_{sa}-j^{sa}-l_s}}$$

$$\frac{\binom{n_{ik}+j_{sa}+j_s}{j_s} \binom{n_{sa}+j_{sa}^{ik}-j_{sa}-l_k}{j_s-s-l_k}}{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-l_k-j_{sa}^{ik}-j_{sa}-l_k-j_s)! \cdot (n+j_{sa}^s-s-j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq (D + j^{sa} + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{j_{sa}^i} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}^i} \frac{(n_i - j_s - j_{sa} - \mathbb{k})!}{(j_s - \mathbb{k})! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(n_{is} - n_{sa} - 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{j_{sa}^i} \sum_{j_{sa}=j_s+j_{sa}-1}^{j_{sa}^i} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik})) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 2 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s \geq 3 \wedge s = j_{sa} + \mathbb{k} \wedge$$

$$z = s$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} + 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l-1}^{(l_k - j_{sa} + 2)} \sum_{n_{is}=n-D-j_{sa}+1}^{(l_k - j_{sa} + 2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{(n_{ik}-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik})! (n + j_{sa}^{ik} - j_s)!} \cdot \frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - j_s)!}{(D + j^{sa} + s - n - j_{sa}^{ik})! (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_s \leq l_{sa} \leq D + l_{ik} + j_{sa} - l_s - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - l_s \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_s-l} \sum_{j^{sa}=l_i+n+j_{sa}-s}^{j^{sa}=l_i+n+j_{sa}-s} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-1)!} \cdot \frac{(n_{is}+j_s-j^{sa}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{sa}-n_{sa}-1)!}{(j_s-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}-l_s-j_{sa}+1)!}{(j_s+l_{sa}-j^{sa}-l_s)! \cdot (j^{sa}-j_s-j_{sa}+1)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j^{sa}-n-l_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!} + \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{j^{sa}=l_s+j_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!} \cdot$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=l}^{l_s} \sum_{i=0}^{l_s - j_{sa} - k} \sum_{l=0}^{l_s + j_{sa} - l} \sum_{s=0}^{l_s - D - s} \binom{n}{n_i} \binom{n}{n_{is} + k - j_s + 1}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}} \binom{n}{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k}$$

$$\frac{\binom{n_{ik} + j_{sa}^{ik}}{n_{ik} + j_{sa}^{ik} - n_{sa}} \cdot j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$+ j_s \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_{is} - n_{sa} - j^{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j^{sa} - j_s - 1)!}$$

$$\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l \neq i \wedge l_s \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

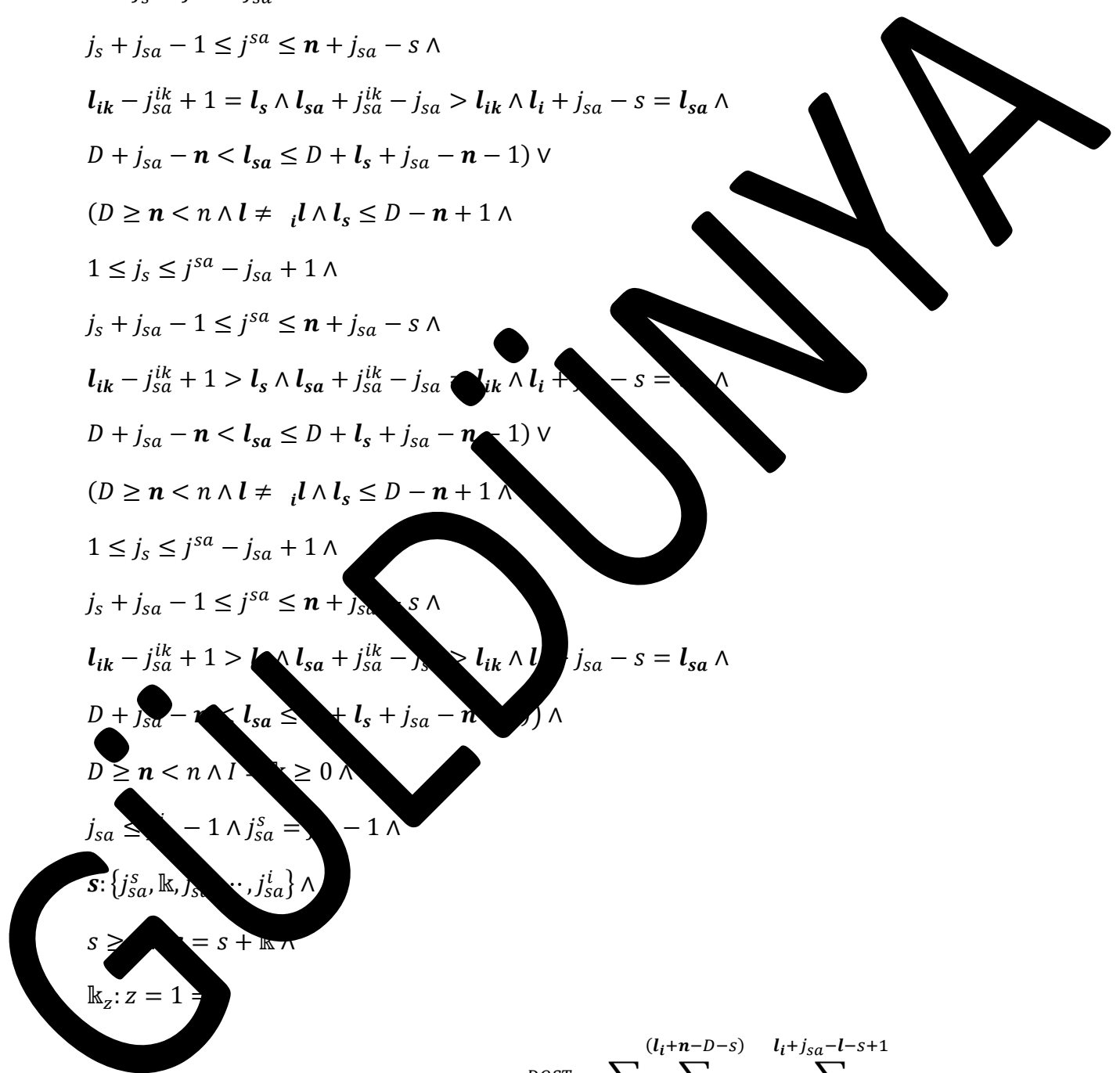
$$s: \{j_{sa}^s, k, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$s \geq j_{sa}^s = s + k \wedge$$

$$k_z: z = 1 =$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{n_{is}+j_s-j^{sa}-k}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1}$$





$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} \sum_{n+l_k}^n \sum_{n+l_k-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - j_{sa})! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-}$$

$$\sum_{n_i=n}^n \sum_{=n+j_s+1}^{(j_s+1)}$$

$$\sum_{n_{ik}=} \sum_{(n_{sa}=j_{sa}^{ik}-j_{sa}-k)}^{(j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s)}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_s^s)} \cdot (n + j_{sa}^s - s - j_s)!$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D > n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=i}^n \sum_{l=1}^{\binom{()}{j_s=1}} \sum_{j_{sa}=j_s} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \right) + \left( \sum_{k=i}^n \sum_{l=1}^{\binom{()}{j_s=1}} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} + 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (n - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_i - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s - \mathbb{k})!} \cdot \sum_{k=i}^{\mathbb{k}} \sum_{l=0}^{\mathbb{k}-k} \sum_{a=j_{sa}}^{(n)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j^{sa}-\mathbb{k}+1)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{(n_{sa}+j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_{ik} + j_{sa}^{ik} - j_{sa} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}{(D - l_i)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n + \mathbb{k} \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{sa} - j_{sa}^s \wedge$$

$$n + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq n - j_{sa} - \mathbb{k} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + j_{sa} - n \wedge$$

$$D \geq n < n + \mathbb{k} \wedge l_i = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=i} \sum_{l}^{( )} \sum_{j^{sa}=j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}-\mathbb{k}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)} \frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - j_s - 1)! \cdot (n_i + j^{sa})!} \cdot \frac{(D + j_s - l_{sa} - s)!}{(D + j_{sa} - n - l_i - s)! \cdot (n - s)!} \sum_{k=i} \sum_{l}^{( )} \sum_{j^{sa}=j_{sa}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}^{n_{ik}+j_{sa}-j_{sa}^{ik}+1} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_s^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge \\ & l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee \\ & (D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge \end{aligned}$$



$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^s = j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz_{j_s, j^{sa}}^{SDOST} = \sum_{k=i}^{\binom{\cdot}{l}} \sum_{(j_s=1)}^{\binom{\cdot}{l_{sa-i} l^{l+1}}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{sa}=n-j^{sa})}^{\binom{\cdot}{(n_i-j^{sa}-k+1)}}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} + 1)!}$$

$$\frac{(n_i - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_i - j^{sa})!}$$

$$\frac{(l_{sa} - j^{sa} - j_{sa} + 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j_s - s)!}$$

$$\sum_{k=i}^{\binom{\cdot}{l}} \sum_{(j_s=1)}^{\binom{\cdot}{l}} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{sa}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{\binom{\cdot}{(n_i-j^{sa}-k+1)}}$$

$$\sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k}^{\binom{\cdot}{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s > D - j_s + 1 \wedge$$

$$2 \leq l_s \wedge D + l_s - j_s - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} \wedge$$

$$j_s + j_{sa}^a \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j_{sa}-j_{sa}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \right) +$$

$$\left( \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_{sa}-j_{sa})} \sum_{j_{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \right)$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}^{n}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}-j_s-k)}^{n_{is}-j_s-k} \frac{(n_{is}-j_s-k)!}{(n_{is}-j_s-k)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-j_s-k)!}{(n_{is}-j_s-k)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-1-k)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!}$$

$$\frac{(l_s-l-1)!}{(j_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{is}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{S^{DO}}_{j_s, j^{sa}} = \sum_{k=l}^n \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l-j_{sa}^{ik}+2)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(n_i=n+l_k)} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i_{ik} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)!} \cdot \frac{(l_s - l - j_s + 1)! \cdot (j_s - 2)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l_s > D - n + j_s \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - j_s \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s - l_{sa} + j_{sa} - j_s - l_{ik} \wedge$
- $D \geq n < n \wedge l = \mathbb{k} > j_s \wedge$
- $j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$
- $s \geq 4 \wedge s = j_s + \mathbb{k} \wedge$
- $\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)} \sum_{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa}+n_{sa}-j_{sa})} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right) \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(n_i - j_s + 1)!}{(n_i + l_{sa} - j^{sa} - l_s)! \cdot (n_i - j_s + 1)!} \cdot \\
& \left. \frac{(n_i + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n_i + j_{sa} - j^{sa} - s)!} \right) - \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$



$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOST}_{j_s, j_{sa}} = \left( \sum_{k=l} \sum_{(j_s = j_{sa} - j_{sa} + 1)} \sum_{j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \sum_{n_i = n + k} \sum_{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \left( \sum_{k=l} \sum_{(j_s = l_s + n - D)} \sum_{j_{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}} \sum_{n_i = n + k} \sum_{(n_{is} = n + k - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l_s+n-j^{sa}+1}^{l_s+l-1} \sum_{i_s=n+k}^{i_s+l-1} \frac{(i_s - i_s + 1)! \cdot (n_{is} + j_s - j^{sa} - k)!}{(j_s - i_s + 1)! \cdot (n_{is} + j_s - j^{sa} - k)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - i_s + 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

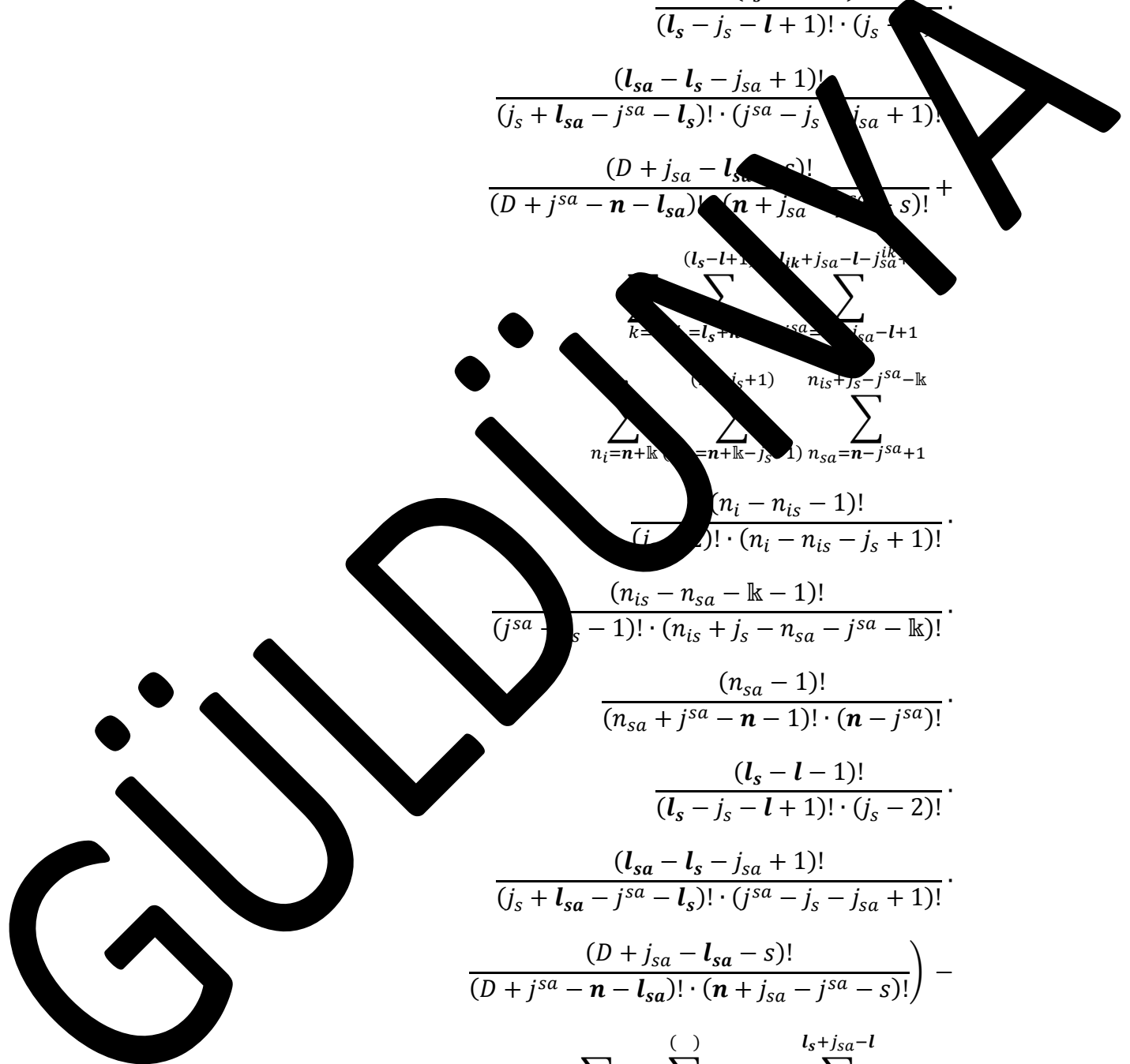
$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$



$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = \mathbb{k} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - \mathbb{k} \wedge j_{sa}^s \leq j_{sa}^l - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k} : z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)} \sum_{j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}^{sa}+1}^{n_{is}+j_s-j_{sa}^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{l_s + j_{sa} - l}{j_s = j^{sa} - j_{sa} + 1}} \sum_{j^{sa} = l_i + n + \dots - D - s}^{n} \sum_{n_i = n + \dots - j_s + 1}^{n} \dots \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - l_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s)!} \cdot (n + j_{sa}^s - s - j_s)! \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_{sa} + \dots - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$D > n < n \wedge D > D - \dots + 1 \wedge$

$2 \leq l \leq D + l_s + \dots - n - \dots$

$2 \leq j_s + j_{sa} - j^{sa} \wedge$

$j_s + j_{sa} \leq j^{sa} < n + j^{sa} - s \wedge$

$l_i + j_{sa} - 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
f_Z S_{j_s, j^{sa}}^{DOST} = & \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{lk}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \left. \frac{(D + j^{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
& \left( \sum_{k=l}^{(l_{ik}+n-D-j_s)} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_s)} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - l_k - 1)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l + 1)!}{(l_s - l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(l_s + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{()} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$((D \geq n < n \wedge l_s > D - n + 1 \wedge$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^i = j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s \in \{j_{sa}^s, \dots, \mathbb{k}\}, \dots, j_{sa}^l, \dots, S: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z: z = \dots \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{()}{j_s=j_{sa}-j_{sa}+1}} \sum_{j_{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \right.$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+\mathbb{k}-j_s+1}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( \sum_{k=l}^{(j^{sa} - j_s - 1)} \sum_{(j_s = l_s + n - D)}^{l_s + j_s - l} j^{sa} = l_{sa} + n - k \right)$$

$$\sum_{n+l_k}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{n_{is} + j_s - j^{sa} - k} \sum_{n_{sa} = n - j^{sa} + 1}^{j^{sa} + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{l_{sa} - l + 1} j^{sa} = l_s + j_{sa} - l + 1$$

$$\sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{n_{is} + j_s - j^{sa} - k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - 1)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - 1)!}$$

$$\sum_{k=l}^{( )} \sum_{j_s = \dots}^{( )} \sum_{l_s + j_{sa} - l}^{( )} \sum_{n_{is} = n + \dots}^{( )} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{( )}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{( )} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}}^{( )}$$

$$\frac{(n_{ik} + j^{sa})^{j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k}}!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - 1)^{j_{sa} - \mathbb{k} - j_{sa}^s}! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n + 1) \wedge (n_{is} = n + 1) \wedge$$

$$D + l_s + j_s - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq n - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \vee$$

$$(D \geq n < n + 1 \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sigma_{j_s, j_{sa}}^{DOST} &= \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_s-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+\mathbb{k}}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{\binom{l_s+j_{sa}-l}{j^{sa}=l_i+n+j_{sa}-D-s}}$$

$$\sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}+k-j_s+1}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l - k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} \wedge$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{\mathcal{S}_{j_s, j_{sa}^{DOST}}} = \left( \sum_{k=l}^{(l_s - l)} \sum_{j_s=l_s+n-D-j_{sa}+k}^{(l_s - l)} \sum_{j_{sa}=j_s+j_{sa}-1}^{(l_s - l)} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i - j_s - \mathbb{k})} \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(l_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} \right) + \\ \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{j_s=l_s+n-D}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \right) \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l)} \sum_{n_{is}=n+k}^{(n_{is}=n+k-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{sa}=n-j^{sa})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} - \mathbb{k} \wedge l_i + j_{sa} - s > l_{sa}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_i+n+j_{sa}-D}^{l_{sa}-l+1} \sum_{n_i=n}^{\binom{()}{j_s+1}} \sum_{n_{i_k}=n}^{\binom{()}{j_s+1}} \frac{(n_{i_k} + j^{sa} + j_{sa}^{ik} - n - j_{sa}^{ik} - l_k - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!}{(n_{i_k} + j^{sa} + j_{sa}^{ik} - n - j_{sa}^{ik} - l_k - j_{sa}^s) \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{i_k} + j_{sa}^{ik} + 1 = l_s \wedge n_{i_k} + j_{sa}^{ik} - j_{sa} = l_{i_k} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$\geq n < n \wedge l = l_k > 0 \wedge$$

$$j_{sa} \leq l_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$> 4 \wedge s + l_k \wedge$$

$$l_{k_z}: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=l_{i_k}+n+j_{sa}-D}^{l_{i_k}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_{i_k}=n}^{\binom{()}{j_s+1}}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i - 1)!}{(l_i + j^{sa} - n - 1)! \cdot (n - l_i - j_{sa} - s)!} \cdot \\
 & \sum_{k=l}^{(j_s)} \sum_{(j_{sa}+1)}^{(j_s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(j_s)} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(j_s)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$n \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_{zS}^{DOST} = \sum_{k=l}^{\binom{()}{j_s=j_{sa}^s-j_{sa}+1}} \sum_{j_{sa}=l_s+l}^{l_s+j_{sa}-l} \sum_{j_{sa}=D-1}^{j_{sa}-D-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n+\mathbb{k}-j_s+1}^{n_{is}+j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - j_s + 1)!}{(n_i - j_s + 1)!} \cdot \frac{(n_{is} - n - \mathbb{k} - 1)!}{(n_{is} + j_{sa} - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{\binom{()}{j_s=j_{sa}^s-j_{sa}+1}} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{()}{}}$$

$$\frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z^{POST} = \sum_{k=l}^{(l_{sa}-l-j_s+2)} \sum_{j_s=l_{sa}-D-j_{sa}+1}^{(l_{sa}-l-j_s+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_s+2)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{j_s=l_i+n-D-s+1}^{(l_{sa}-l-j_{sa}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l-j_{sa}+2)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{(\quad)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_s - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa}^s = l_{ik} \wedge l_{sa} - j_{sa} - s > 0 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1, j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, \dots, j_{sa}\} \wedge$$

$$s \geq 4 \wedge s = \mathbb{k} \wedge$$

$$l_{ik} = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1) \leq j_{sa} \leq j_{sa} - 1} \sum_{n_i = n - j_{sa} + 1}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{n - j_{sa} + 1} \sum_{n_{ik} = n_{is} + j_{sa} - j_s}^{n_{is} + j_{sa} - j_s} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k}}^{n_{is} + j_{sa} - j_s} \frac{(n_{ik} + j_{sa} + j_{sa}^{ik} - n_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - n_{sa} - j_s - \mathbb{k} - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa} + j_{sa}^{ik} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D > n < n \wedge n > D - l_i + 1 \wedge$
- $2 \leq i \leq j^{sa} - j_{sa} - 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 \leq l \wedge l_{ik} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$
- $D > n > 0 \wedge I = \mathbb{k} > 0 \wedge$
- $j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $\mathbf{s}: \{j_{sa}, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$
- $\mathbb{k}_z: z = 1 \Rightarrow$

$$\begin{aligned}
 f_{z} S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)} j^{sa}=j_s+j_{sa}-1 \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - k)!} \cdot \\
 &\frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 &\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D + j^{sa} - l_s - s)!}{(D + j^{sa} - n - l_s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} j^{sa}=j_s+j_{sa}-1 \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{()} \\
 &\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(j_{sa}-j_{sa}+1)} \sum_{(j_{sa}=l_i+n+j_{sa}^{ik}-s)}^{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{is}+j_s-j_{sa}-\mathbb{k})}$$

$$\frac{(j_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(n_{sa} - j_s - 1)! \cdot (n_i + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-l-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{is}+j_s-j_{sa}-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

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$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{j_s = j_s - j_{sa} + 1}^{( )} \sum_{l_i = l_i - j_{sa} - D - s}^{( )}$$

$$\sum_{n_i = n_i + 1}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^s - j_{sa}^{ik}}^{( )} \sum_{(n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k})}^{( )}$$

$$\frac{(n_{ik} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s = D + n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z^{SDOST} S_{j_s, j^{sa}} = & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_i+n-D-s)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l - j_{sa} + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_i+j_{sa}-l-s+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot
 \end{aligned}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1) \wedge j^{sa} = j_{sa} - 1} \sum_{n_i = n - k}^n \sum_{n_{is} = n + k - j_s + 1}^{n - k} \sum_{n_{ik} = n_i + j_{sa}^s - j_s}^{n_i} \sum_{n_{sa} = n_{ik} + j_{sa}^{ik} - j_{sa} - k}^{n_i} \frac{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^s + j_{sa}^{ik} - n_{sa} - j_{sa} - k - j_s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D - j_{sa}^s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D - n < n \wedge n > D - l_i + 1 \wedge$$

$$2 \leq i \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_i \wedge l_i + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D - n \leq l_i \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i=j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}^{ik}+1} \cdot \sum_{(j_s=n+l_{ik}-j_s+1)}^n \sum_{(j_s=n+l_{ik}-j_s+1)}^{i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j_{sa}^{ik}+1}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^s)}^{()}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!}$$

$$\frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = l_{ik} = 0 \wedge$$

$$j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, l_k, j_{sa}^s, \dots, j\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + l_k \wedge$$

$$l_k; z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l - j_{sa} - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{l=1}^{(l_{ik}-l-j_{sa}^{ik})} \sum_{(j_s=n_{sa}+1)}^{(j_s=n_{sa}+1)} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)} \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-k-j_{sa})!} \cdot \frac{(n+j_{sa}-j_s)!}{(l_s-1)!} \cdot \frac{(l_s-1)!}{(j_s-2)!} \cdot \frac{(D-j_s)!}{(D+j_{sa}+s-n-j_{sa})!} \cdot \frac{(n+j_{sa}-j^{sa}-s)!}{(n+j_{sa}-j^{sa}-s)!}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$(l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa})) \wedge$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^i\} \vee \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} = & \sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_{sa}+n-D-j_{sa})} \sum_{j^{sa}=l_{sa}+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik} + 2)} \sum_{(j_s = l_i + n - D - s + 1)} \sum_{j^{sa} = j_s + j_{sa} - 1} \sum_{n_i = n + k}^n \sum_{(n_{is} = n_{ik} + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{sa} - k)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - i - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j^{sa} - j_s - s - k)!} \cdot \frac{(l_s - l - k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s > D - n + 1) \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee \\ & (D \geq n < n \wedge l_s > D - n + 1 \wedge \\ & 2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge \\ & j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge \\ & D \geq n < n \wedge l = k > 0 \wedge \end{aligned}$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s = l_s + n - D)}^{l_s + j_{sa} - l} \sum_{j_{sa} = l_i + \dots}^{l_s + j_{sa} - l} \sum_{n_{is} = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_{sa} - l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = l_s + n - D)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{l_i + j_{sa} - l - s + 1} \sum_{n_{is} = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - l_{sa} - s)!}$$

$$\sum_{k=l}^{(j_s - j^{sa} - l_s + 1)} \sum_{j^{sa}=l_{sa}+1}^{(l_s - l - k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{(j_s - s - l_k)} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{(n_{sa} - n_{ik} + j_{sa} - j_{sa} - l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa} - j_s - s - l_k - j_{sa})! \cdot (n + j_{sa} - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D - n < n \wedge l_s > l_i - n + 1 \wedge$$

$$2 \leq j_s \leq j_s - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D - n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{j_s=l_s+n-D-s+1}^{n-l_s+l_s+l-s+1} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{n-l_s+l_s+l-s+1} \sum_{n_j=n+\mathbb{k}}^n \sum_{n_{i_s}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{i_s}+j_s-j_{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{sa} - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{i_s} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - j_s)! \cdot (n - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{(i_s=l)}^{(i_s=l+1)} \sum_{(n_{sa}=D-j_{sa}+1)}^{(n_{sa}=D-j_{sa}+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{n} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_i-j_s+1)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_Z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=l_s+n-D)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_s - l_s - 1)!}{(l_s - l_s - 1)! \cdot (j_s - j_s - j_{sa} + 1)!} \cdot \\
 &\frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{\substack{l_s+j_{sa}-l \\ j^{sa}=l_i+n+j_{sa}-D-s}} \sum_{n_i=n+k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}+k-j_s+1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}-k}} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - k)!} \cdot \frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + \dots - n - l_i - j_s - s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $((D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$
- $2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$
- $j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$
- $(D \geq n < n \wedge l_s > D - n + 1 \wedge$



$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}) \vee$$

$$(D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa}) \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z^{S_{j_s, j^{sa}}}^{DOST} = \sum_{k=1}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=l_s+n-D)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-j_{sa}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{(n-j_s+1)}$$

$$\frac{(n_{is}-1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - 1)! \cdot (j_s + j_{sa} - l_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(l_{sa}-l+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_{sa} \leq D + j_{sa} - n \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOS} = \left( \sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l)} \sum_{j_{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
& \left( \sum_{k=l}^{(j^{sa}-j_{sa})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+2} \right. \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}-l_k}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s-1}} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_k)}^{(n_{sa}-j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_{sa}^{ik} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l - l_k)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D + j_{sa} - n$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq j_s + j_{sa} - s \wedge$$

$$l_s - j_{sa}^{ik} + l_k \leq l_s \wedge l_{sa} - j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D \geq n < n \wedge l = i \wedge l_s \geq 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_k, \dots, j_s^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 1 \wedge l_s = s + l_k \wedge$$

$$l_k: z = 1 \wedge$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left( \frac{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{(j_s=2)}^{(n_i-j_s+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{sa}-l+1} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
 \end{aligned}$$

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$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_s-j_{sa}-l_k)}^{(n_{sa}-j_{sa}+1)} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)!} \frac{(n + j_{sa}^s - j_s)!}{(l_s - l - 1)!} \frac{(l_s - l - 1)!}{(l_s - l + 1) \cdot (j_s - 2)!} \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa})!} \frac{(n + j_{sa} - j^{sa} - s)!}{(n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} >$$

$$D - j_{sa} - n \leq l_s \leq D + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_s^s, \dots, l_k, j_{sa}^s\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \leq s + l_k \wedge$$

$$l_k; z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(n)} \sum_{j^{sa}=l_{sa}+n-D}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa} - s)! \cdot (n + j^{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(n_{is}-j_{sa})} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_{sa}+n-D}^{j^{sa}=l_{sa}+n-D} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - n - s)!}{(D + j^{sa} - n - s)! \cdot (n - j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=0}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{n_i=n+\mathbb{k}}^{\sum_{j_s=l_i+n-D-s+1}^{(l_{ik}-l-j_{sa}^{ik}+2)}} \sum_{j_{sa}=j_s+j_{sa}-1}^{\sum_{n_{is}=n+\mathbb{k}-j_s+1}^{l_{sa}-l+1}} \frac{(n_i - n_{is} - 1)!}{(j_s - l)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j_{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{lk}-j_{sa}-\mathbb{k})} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > 0 \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s - 4 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-l-j_{sa}^{lk}+2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \left( \sum_{k=l}^{(l_{sa} + n - D - j_{sa})} \sum_{(j_s=2)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+n-D}^{(l_{sa}-l+1)} \right) \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^k+2)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{(l_{sa}-l+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{(n_{is}+j_s-j^{sa}-\mathbb{k})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}
 \end{aligned}$$

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$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{(l_{ik} - l - j_{sa}^{ik})} \sum_{j_s=l_i+n-l_{sa}+1}^{n} \sum_{j_{sa}=j_s+j_{sa}^{ik}}^{n} \sum_{n_i=n+l_k}^{(n_i - j_s + 1)} \sum_{n_{is}=n_{is} - j_s + 1}^{n} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{(n_{sa} - n_{ik} + j_{sa}^{ik} - j_{sa} - l_k)} \frac{(n_{ik} + j_{sa}^{ik} - j_s - s - l_k)!}{(n_{ik} + j_{sa}^{ik} - l_k - j_{sa} - l_k - j_{sa})! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n \wedge n \wedge l \neq i \wedge l \leq D - n + 1 \wedge$$

$$2 \leq l \leq D - n + j_{sa} - l_{sa} \wedge$$

$$1 \leq j_{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z \mathcal{S}_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l} \sum_{\binom{(\cdot)}{(j_s=j^{sa}-j_{sa}+1)}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_s}^{l_s+j_{sa}-l} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\ \left( \sum_{k=l} \sum_{\binom{(j^{sa}-j_{sa})}{(j_s=2)}} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_s+j_{sa}-l} \right. \\ \left. \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}-j_s+1)}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right)$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{ik}+j_s-j^{sa}-l_k} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \sum_{(n_{is}=n+l_k-j_s)}^{n_{is}-j^{sa}-l_k} \frac{(n_{is}-n_{sa}-1)!}{(i_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{sa}-1)!}{(j^{sa}-j_s-1)! \cdot (n+l_s-n_{sa}-l_k)!}$$

$$\frac{(n_{is}-n_{sa}-1)!}{(n_{sa}-j^{sa}-n-1)! \cdot (n-j^{sa})!}$$

$$\frac{(l_s-l-1)!}{(D+j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i \wedge l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^k - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_a^D = \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik}}^{n_{is} + j_s - j^{sa} - \mathbb{k}}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{is} - n_{sa} - \mathbb{k} - 1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$



$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{(n_{sa}=n_{ik}+j_{sa}^{ik}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} - n - l_i - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

- $D \geq n < n \wedge l \neq i \wedge l_s \leq -n + 1$
- $2 \leq l \leq D + l_s + j_{sa} - n - 1 \wedge$
- $1 \leq j_s \leq j^{sa} - j_s \wedge$
- $j_s + j_{sa} \leq j_s \leq n + j_{sa} - s \wedge$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s + l_{sa} + j_{sa} - j_s - l_{ik} \wedge$
- $D + j_{sa} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$
- $D \geq n < n - l = l_k > 0 \wedge$
- $j_{sa}^{ik} - j_s - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, j_{sa}^s, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$
- $s \leq j_{sa} - s = s + l_k \wedge$
- $l_{z}: z = 1 \Rightarrow$

$$f_z S_{j_s, j^{sa}}^{DOST} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D + j^{sa} - n - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - l_{sa} - s)!} + \\
& \left( \sum_{k=l}^{n-D-j_s} \sum_{(j_s=j_s)}^{n-D-j_s} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \right) \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - l_k - 1)!} \cdot \\
 & \frac{(n_i - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l + 1)!}{(l_s - l_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(l_s + l_{sa} - j^{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{(\quad)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

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$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa}^{ik} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \wedge$$

$$D > n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOST} = & \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=j_{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s - 1)!}{(l_s - l_s - 1)! \cdot (j_s - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} + l_{sa} - s)!}{(D + j_{sa} + l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}
 \end{aligned}$$

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$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^{ik} - n - l_i - j_s - s - l_k)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$j_{sa}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j_{sa}-k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)} j^{sa} = j_s + j_{sa} - 1$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{ik} + j_{sa} - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l)!}{(D + j^{sa} + s - n - j_{sa} - j_{sa}^{ik} - j_{sa} - j_s - s)!} \cdot (n + j_{sa} - j^{sa} - s)!$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$



$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=l}^{(n_i - j_s + 1)} \sum_{j_s = j^{sa} - j_{sa} + 1}^{(n_i - j_s + 1)} \sum_{j_{sa} = j_{sa} + 1}^{l_s + j_{sa} - l} \right. \\ \sum_{n_i = n + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ \left. \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \\ \left( \sum_{k=l}^{(j^{sa} - j_{sa})} \sum_{(j_s = 2)}^{(j^{sa} - j_{sa})} \sum_{j_{sa} = j_{sa} + 2}^{l_s + j_{sa} - l} \right)$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} - 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
& \sum_{(j_s=2)}^{(l_s-l+1)} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) -
\end{aligned}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=j_{sa}+1}^{l_s+j_{sa}-l}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_k)}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^{s} + j_{sa} - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - n)!}{(D + j^{sa} + s - n - j_{sa} - j_s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa}^{ik} - n) \vee$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$((D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l \neq i, l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \left( \sum_{l=1}^{(l_s-1)} \sum_{(j_s=2)}^{(l_s-1)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \right) + \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=j_s+j_{sa}} \right)$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(n + j_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n - j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{l=1}^{(l_s-l+1)} \sum_{(j_s=2)}^{j^{sa}=j_s+j_{sa}-1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_{zS}^{DOST}_{j_s, j^{sa}} = & \left( \sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)} \sum_{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) + \\
 & \left( \sum_{k=l} \sum_{(j_s=2)} \sum_{l_s+j_{sa}-l} \right. \\
 & \sum_{n_i=n+l_k} \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \left. \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \right) + \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - l_k)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \\
 & \frac{(l_s - j_s - l + 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_s - l_s + 1)!}{(l_s - l_s + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left( \frac{(D + j_{sa} - j_{sa} - s)!}{(D + j_{sa} - j_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \right) \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$((D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$



$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - 1) \vee$$

$$(D \geq n < n \wedge l \neq i_l \wedge l_s \leq D - n + 1 \wedge$$

$$D + l_s + j_{sa} - n - l_{sa} + 1 \leq l \leq i_l - 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s \geq 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 1 \Rightarrow$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_s - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

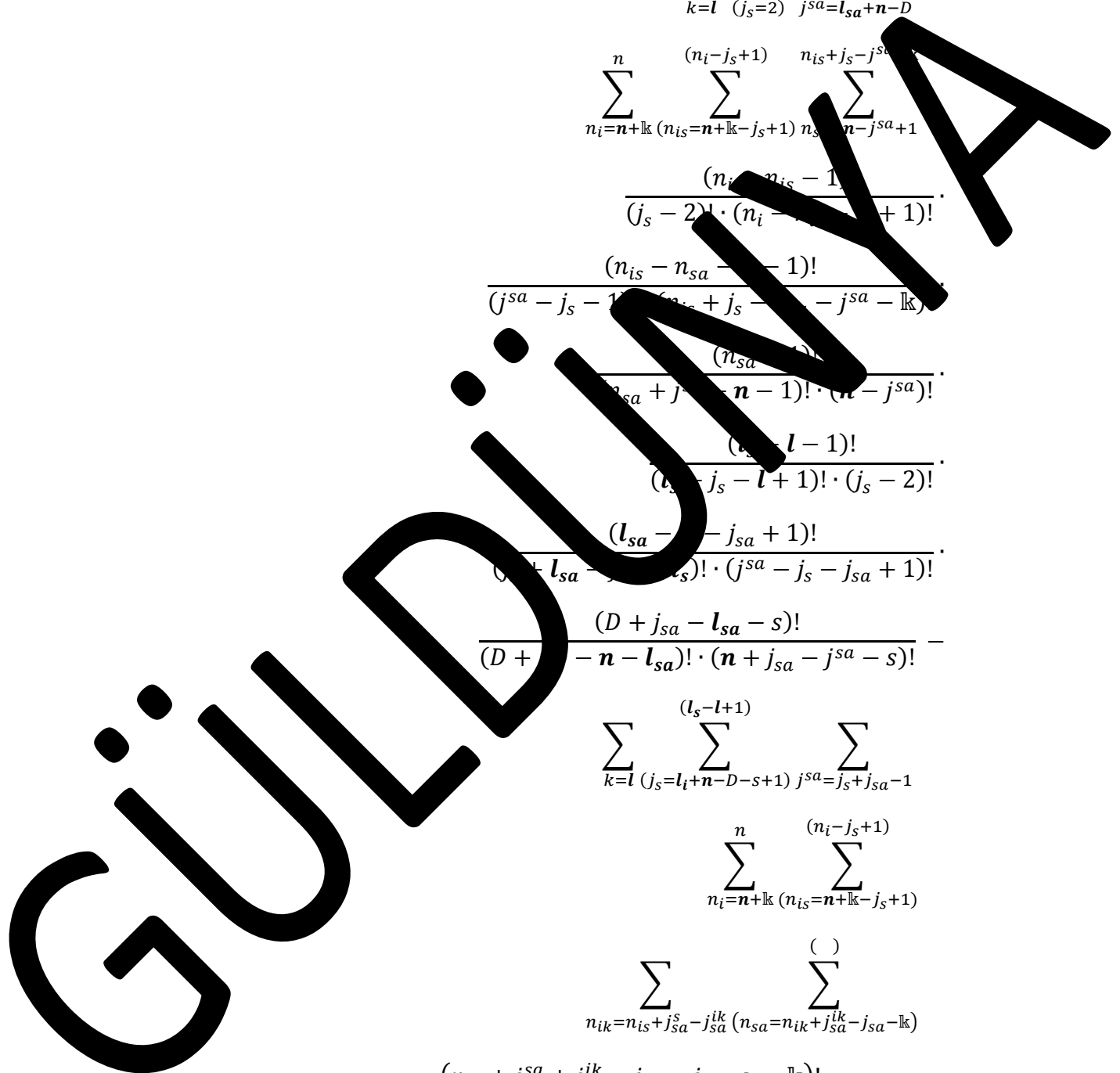
$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l+n-D-s+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$



$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\left( (D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge \right.$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_{sa} - j_{sa}^{ik} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$2 \leq l \leq D + l_s + j_{sa} - n - l_{sa} \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_Z^{\mathcal{S}_{j_s, j_{sa}^{DOST}}} = \left( \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}^{sa}+1)}^{j_{sa}^{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{n_{is}} \sum_{(n_{is}+j_s-j_{sa}-\mathbb{k})}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}+j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-n-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \right) +$$

$$\left( \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{sa}+n-D}^{j_{sa}^{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{sa}-\mathbb{k})}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{sa}-\mathbb{k}-1)!}{(j_{sa}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} \right)$$

$$\begin{aligned}
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{sa}-l+1)} \sum_{j_s+j_{sa}}^{(l_{sa}-l+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n-j_s+1)} \sum_{n_{sa}=n-j^{sa}+k}^{(n-j_s+1)} \\
 & \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i - j_s + 1)!} \cdot \\
 & \frac{(n_{sa} - n_{sa} - 1)!}{(j_s - j_s - 1)! \cdot (j_s + j_s - l_{sa} - j^{sa} - k)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j_s - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \left. \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \right) - \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-l+1)} \sum_{j_s+j_{sa}-1}^{(l_s-l+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-k)}^{( )}
 \end{aligned}$$

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$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa})!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\sum_{k=l}^n \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(j_s=j^{sa}-j_{sa}+1)} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-l+1} S_{j_s, j_{sa}}^{DOST} = \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_i=n+\mathbb{k}}} \sum_{n_i+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{sa}^s}} \sum_{n_{ik}-\mathbb{k}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s - j_s)!}$$

$$\frac{(l_s - l)}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + j_{sa}^s - n - l_i - j_s - s - \mathbb{k})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq -n + 1$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j_s \leq n + j_{sa} - s$$

$$l_s - j_{sa}^{ik} + j_{sa}^s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{sa} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} - j_{sa} - s - j_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = j_{sa}^i + \mathbb{k} \wedge$$

$$\mathbb{k}_2 \wedge s \geq 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{\binom{()}{j_s=j^{sa}-j_{sa}+1}} \sum_{j^{sa}=j_{sa}+1}^{l_{sa}-l+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n_{sa} - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_s - 1)!}{(D + j^{sa} - n - 1)! \cdot (n_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{\binom{D}{j_s}} \sum_{(j_s=j)}^{\binom{D}{j_s+1}} \sum_{j_s=l_i+n+j_{sa}-D-s}^{l_{sa}-1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{\binom{D}{j_s}}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$n > n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$l_i \leq D + s - n \wedge$



$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

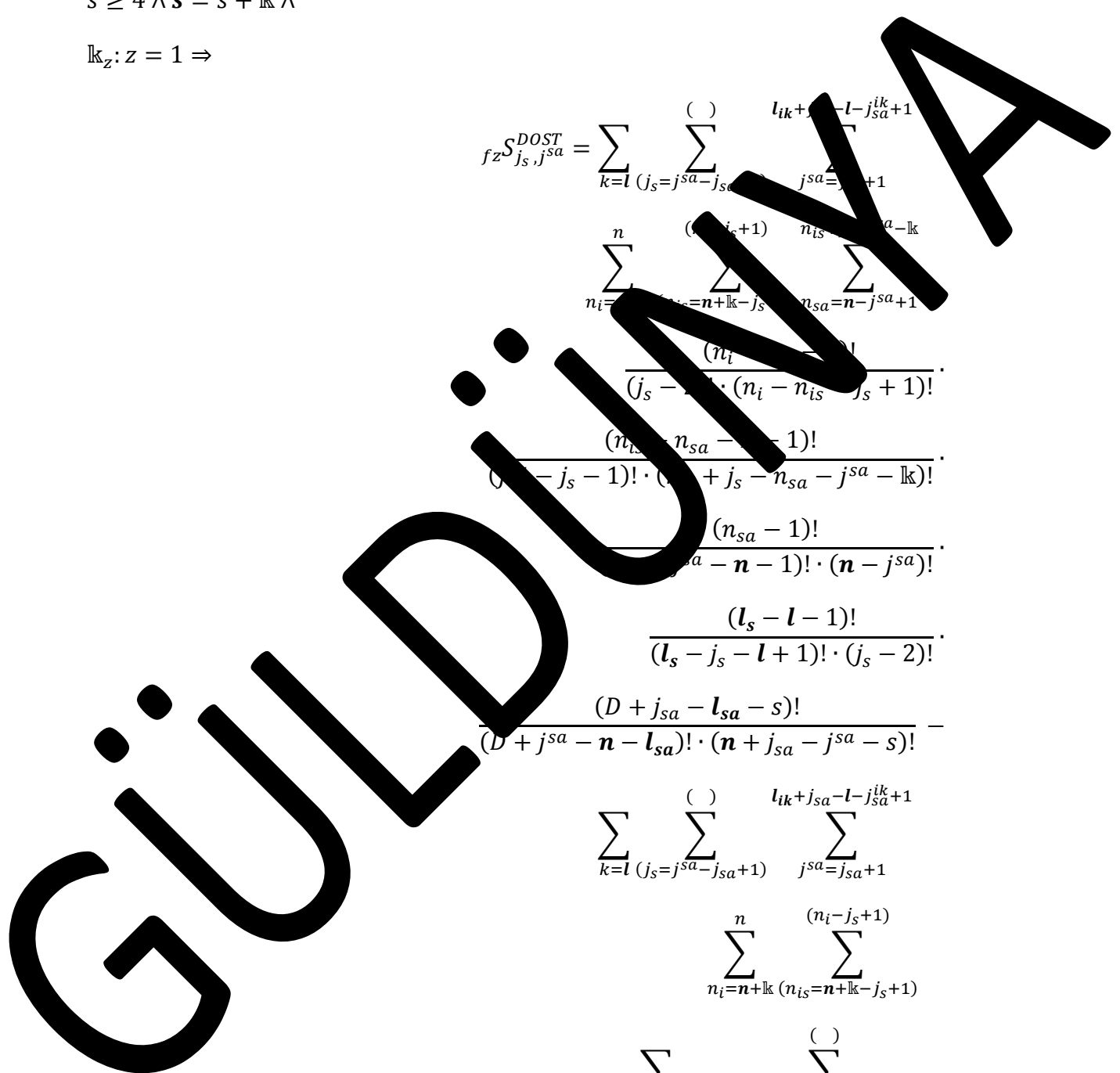
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=j_{sa}^i-j_{sa})} \sum_{(j_{sa}^i=j_{sa}^i+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^i-j_{sa}^i+1} \cdot \sum_{n_i=n+\mathbb{k}-j_s}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)} \sum_{(n_{sa}=n-j_{sa}^i+1)} \binom{n_i}{j_s-j_s+1} \cdot \frac{(n_i-n_{is}+1)!}{(j_s-j_s+1)! \cdot (n_i-n_{is}+j_s+1)!} \cdot \frac{(n_{is}+n_{sa}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{sa}-j_{sa}^i-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}-n-1)! \cdot (n-j_{sa}^i)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}^i-s)!} \cdot \sum_{k=l} \sum_{(j_s=j_{sa}^i-j_{sa}+1)} \binom{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}{j_{sa}^i-j_{sa}^i+1} \cdot \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \binom{n_i-j_s+1}{n_i-j_s+1} \cdot \sum_{n_{ik}=n_{is}+j_{sa}^i-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \binom{n_{ik}+j_{sa}^i+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k}}{(n_{ik}+j_{sa}^i+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^i)! \cdot (n+j_{sa}^i-s-j_s)!}$$



$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}, k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s}^{l_s} = \sum_{k=l}^{(\cdot)} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(\cdot)} \sum_{j^{sa}=j_{sa}+1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik}+j^{sa}+j_{sa}^{ik}-j_{sa}-j_s-s)!}{(n_{ik}+j^{sa}+j_{sa}^{ik}-n-j_{sa}-l_k-j_{sa})! \cdot (n+j_{sa}-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D-s)!}{(D+j^{sa}+s-n-j_{sa})! \cdot (n+j_{sa}-j^{sa}-s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} \wedge j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq n + s - n \wedge$$

$$D \geq n < n \wedge l_k > 0$$

$$j_{sa} - j_{sa}^i - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge S: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_k, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s$$

$$l_{k_z} \cdot z = 1$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}-l-j_{sa}+2)} \sum_{(j_s=2)} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{n_i=n+1}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_{sa}^s - j_{sa}^{ik}}^{(l_{sa} - l - j_s + 2)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik} - j_{sa} - \mathbb{k}}^{(n_{sa} - j_{sa} - j_s - s - \mathbb{k})} \frac{(n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_s - s - \mathbb{k})!}{(n_{ik} + j_{sa}^{ik} - n_{sa} - j_{sa} - \mathbb{k} - j_s - s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$n_i + j_{sa} - j_s \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{is}+j_{sa}-1)}^{(n_{is}-j_{sa}-\mathbb{k})} \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{sa}-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_s-1-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}-1)! \cdot (n-j_{sa})!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!} \cdot \frac{(D+j_{sa}-l_{sa}-s)!}{(D+j_{sa}-n-l_{sa})! \cdot (n+j_{sa}-j_{sa}-s)!} \cdot \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)} \sum_{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \frac{(n_{ik}+j_{sa}+j_{sa}^{ik}-j_{sa}-j_s-s-\mathbb{k})!}{(n_{ik}+j_{sa}+j_{sa}^{ik}-n-j_{sa}-\mathbb{k}-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!} \cdot \frac{(l_s-l-1)!}{(l_s-j_s-l+1)! \cdot (j_s-2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_s^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, k, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + k \wedge$$

$$k_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{l_s, l_{sa}} = \sum_{i=1}^{(j_s - j_{sa} + 1)} \sum_{\substack{l_i=1 \\ l_i \neq 2}}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_i + n + j_{sa} - D - s}^{n_{is} + j_s - j^{sa} - k} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\begin{aligned}
 & \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_s}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - l - l_k)!} \cdot \\
 & \frac{(n_i - l - 1)!}{(n_i + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l_i - l + 1)!}{(l_s - l_s - j_s + 1)!} \cdot \\
 & \frac{(l_s - l_s - j_s + 1)!}{(l_s + l_{sa} - j^{sa} - l)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - l - l_{sa} - s)! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, D}^{D, T} = \sum_{k=l}^j \sum_{(j_s)}^{(j_s-1) l_{ik} - l - j_{sa}^{ik} + 1} \sum_{j^{sa}=l_{sa}+n-D}^{(j_s-1) l_{ik} - l - j_{sa}^{ik} + 1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2}^{l_{sa}-l+1}$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-l_k} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l - j_{sa} - 1)!}{(l + l_{sa} - j^{sa} - l_s)! \cdot (j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D + j_{sa} - l - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!} \cdot \\
 & \sum_{i=1}^l \sum_{(i - j_{sa} + 1)}^{l_{ik} + j_{sa} - l - j_{sa} + 1} \sum_{j^{sa}=l_{sa}+n-D}^{j^{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(l_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=1}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+n-j_{sa}-D-s} \sum_{j_s=1}^{l_i+n-j_{sa}-D-s} \frac{(l_i+n-j_{sa}-s)!}{(j_s-1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{l_i+j_{sa}-l-s+1} \sum_{j_{sa}=j_s+j_{sa}-1}^{n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{sa}-\mathbb{k}}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j_s - 1)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_s + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - 1)! \cdot (n + j_s - j^{sa} - s)!} \cdot \\
& \sum_{k=0}^{l - j_{sa}^{ik} + 2} \sum_{i=l_i + n - D + k + 1}^{n - j_s + j_{sa} - 1} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}^{(n_{sa}-n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})} \\
& \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_s^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$D \geq n < n - l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 - j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa}^{ik} - n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s=2)}^{l_s + 1 - l} \sum_{j_{sa} = l_s + n + j_{sa} - j_{sa}^{ik}}^{l_s - l} \sum_{n_i = n + \mathbb{k} - j_s}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s=2)}^{l_{ik} + j_{sa} - l - j_{sa}^{ik} + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \sum_{k=l}^{\binom{D+l_{sa}}{j_s=j^{sa}-j_{sa}+1}} \sum_{j_s=l_{ik}+n+j_{sa}-D-k}^{\binom{D+l_{sa}}{j_s=j^{sa}-j_{sa}+1}} \sum_{n_i=n+l_k}^{\binom{n}{n_i=n+l_k}} \sum_{n_{is}=n+l_k}^{\binom{n-i-j_s+1}{n_{is}=n+l_k}} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}}^{\binom{n-i-j_s+1}{n_{ik}=n_{is}+j_{sa}^{ik}}} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{\binom{n-i-j_s+1}{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}} \frac{(n_{ik} + j_{sa} + j_s - l_s - l - 1)!}{(n_{ik} + j_{sa} + j_{sa}^{ik} - j_s - l_s - l - 1 - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$D \geq l_s < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_s - l_i < n < l_{ik} \leq D + l_s + j_{sa}^{ik} - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j^{sa}}^{DOST} = \sum_{k=l} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik}}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s + j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - j_{sa} - j_s + 1)!}{(j_s + l_{sa} - j_s - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=l} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-l+1)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{ik}+j_{sa}-l-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{ik}+n-D-j_{ik}+1)}^{j^{sa}=j_{sa}-1}$$

$$\sum_{n_i=n}^n \sum_{n_{is}=n+l_k-j_s+1}^{(j_s-l_k)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}-l_k}^{(j_s-l_k)} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}^{(j_s-l_k)}$$

$$\frac{(n_{ik} + j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} - l_k - j_s - s - l_k)!}{(n_{ik} + j_{sa}^{sa} + j_{sa}^{ik} - n_{sa} - j_{sa} - l_k - j_s - s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_{sa}^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee \mathbf{s}: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa}-j_{sa}+1) l_{ik} + l - j_{sa}^{ik} + 1} \sum_{(j_s=2)}^{j_{sa} = j_{sa} + 1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i+1) n_{is} = n - \mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(j_{sa} - n - 1)! \cdot (n - j_{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} + \sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j_{sa}=l_{ik}+j_{sa}-l-j_{sa}^{ik}+2} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1) n_{is}+j_s-j_{sa}-\mathbb{k}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$



$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{( )} \sum_{j_s=j^{sa}-j_{sa}+1}^{( )} \sum_{j^{sa}=j_{sa}+1}^{( )} \dots$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \dots$$

$$\sum_{n_{ik}=n_{is}+j_s}^{( )} \sum_{j_{sa}^{ik} (n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \dots$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_s - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^s - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq (D + s - n) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_i-j_s-\mathbb{k})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{sa} - \mathbb{k} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=2)}^{j_{sa}=j_s+j_{sa}-1} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k})}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!}$$

$$((D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = j_{sa}^i + \mathbb{k} \wedge$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)} \sum_{j_{sa}=l_{sa}+n-D}^{l_{sa}-l+1}$$

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_s - j_{sa} + 1)!}{(D + l_{sa} - j^{sa} - l_s)! \cdot (D + j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!} + \\
& \sum_{k=0}^{l_s-1} \sum_{n_i=n-D-j_{sa}+1}^{(l_{ik} - j_{sa}^{ik} + 2)} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
& \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
& \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (D + j_{sa} - j^{sa} - s)!}
\end{aligned}$$

$$\sum_{k=l}^{(l_{ik}-l-j_{sa}^{ik}+2)} \sum_{(j_s=l_i+n-D-s+1)}^{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^s-j_{sa}^{ik}-j_{sa}^{lk})}^{( )}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - j_s)!} \cdot \frac{(l_s - l + 1)!}{(l_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - s)!}{(D + j^{sa} + s - n - j_{sa}^s)! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1)$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D + l_s + j_{sa} - n - 1 \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$(D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(j_{sa} - j_{sa} + 1)} \sum_{(j_s = \dots)}^{(l_s + j_s - l)} \sum_{j_{sa} = l_i + n + j_{sa} - s} \dots$$

$$\frac{(n_i - j_s + 1)! \cdot (n_{is} + j_s - j_{sa} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_i - \mathbb{k} - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_i + j_s - n_{sa} - j_{sa} - \mathbb{k})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - n - 1)! \cdot (n - j_{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - l_s)! \cdot (j_{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j_{sa} - s)!} +$$

$$\sum_{k=l}^{(l_s - l + 1)} \sum_{(j_s = 2)}^{l_i + j_{sa} - l - s + 1} \sum_{j_{sa} = l_s + j_{sa} - l + 1} \dots$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{sa} = n - j_{sa} + 1}^{n_{is} + j_s - j_{sa} - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{sa} - k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - k)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - l)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{l_s + j_{sa} - l} \sum_{i=0}^{n - j_s + 1} \sum_{l_i=0}^{n_{is} + k - j_s + 1} \sum_{s=0}^{n_{is} + k - j_s + 1}$$

$$\sum_{n_{ik}=n_{is} + j_{sa}^{is} - j_{sa}^{ik} \mid n_{sa}=n_{ik} + j_{sa}^{ik} - j_{sa} - k}$$

$$\frac{(n_{ik} + j_{sa}^{is}) \cdot j_{sa}^{ik} - j_{sa} - j_s - s - k)!}{(n_{ik} + j_{sa}^{is} - n_{sa}^{ik} - j_{sa} - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_s - j_{sa} + 1 \wedge$$

$$+ j_s \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \vee$$

$$(D \geq n < n \wedge l \neq l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} \sum_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(j^{sa}-j_{sa}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}-l} \sum_{j^{sa}=l_{sa}+n-D} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\ &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\ &\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \end{aligned}$$



$$\begin{aligned}
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 & \sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_s+j_{sa}-l+1}^{l_{sa}-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{sa} - 1)!} \cdot \\
 & \frac{(n_{is} - n_{sa} - l_k - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - 1)!} \cdot \\
 & \frac{(n_{sa} + j_s - n - 1)!}{(n_{sa} + j_s - n - 1)!} \cdot \frac{(n_{sa} - j_s - 1)!}{(n_{sa} - j_s - 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} - j_{sa} + 1)!}{(l_{sa} - j_{sa} + 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \\
 & \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} - \\
 & \sum_{k=l}^{( )} \sum_{(j_s=j^{sa}-j_{sa}+1)}^{( )} \sum_{j^{sa}=l_{sa}+n-D}^{l_s+j_{sa}-l} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{sa}^s-j_{sa}^{ik}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k)}^{( )} \\
 & \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!} \\
 & \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j^{sa} + s - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \wedge$$

$$D \geq n < n \wedge l_{sa} - l_s > 0 \wedge$$

$$j_{sa} \leq j_s - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1 \wedge$$

$$S: \{j_{sa}^s, \dots, j_{sa}^i, \dots, j_{sa}^i\} \quad S: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq \mathbb{k} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 =$$

$$fz S_{j_s, j_{sa}}^{DOST} = \sum_{k=l}^{(l_i+n-D-s)} \sum_{(j_s=2)}^{l_i+j_{sa}-l-s+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{n+\mathbb{k} \leq n_i-j_s+1}^n \sum_{n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} \cdot \sum_{k=l}^{(l_s-l+1)} \sum_{j_s=l_i+n-D-s+1}^{l-s+1} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-j_{sa}^{ik}} \sum_{(n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}^{ik})}^{(\ )} \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n + j_s - s - j_s)!} \cdot \frac{(l - l - 1)!}{(l_s - j_s - l - 1)! \cdot (l - 2)!} \cdot (D - l_i)}{(D + j^{sa} + s - n - j_{sa})! \cdot (n - j_{sa} - j^{sa} - s)!}$$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$

$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$

$(D \geq n < n \wedge l \neq i \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1) \vee$$

$$(D \geq n < n \wedge l \neq i l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_s + j_{sa} - n - 1)) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=l}^{(l_{sa}+n-D-j_{sa})} \sum_{(j_s=2)}^{l_{sa}-l+1} \sum_{j^{sa}=l_{sa}+n-D}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot \\
 &\frac{(l_{sa} - j_{sa} + 1)!}{(j_s + l_{sa} - j_{sa} - 1)! \cdot (j^{sa} - j_s - j_{sa} + 1)!} \cdot \\
 &\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!} + \\
 &\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{l_{sa}-l+1} \sum_{j^{sa}=j_s+j_{sa}-1}^{l_{sa}-l+1} \\
 &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j^{sa}-\mathbb{k}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 &\frac{(n_{is} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{is} + j_s - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \cdot \\
 &\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{sa} - l_s - j_{sa} + 1)!}{(j_s + l_{sa} - j^{sa} - l_s)! \cdot (j^{sa} - j_s - j_{sa} + 1)!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=l}^{(l_s-l+1)} \sum_{(j_s=l_i+n-D-s+1)} \sum_{j^{sa}=j_s+j_{sa}-$$

$$\sum_{n_i=n}^n \sum_{n_i=n}^{(j_s+1)} \sum_{n_i=n}^{(j_s+1)}$$

$$\sum_{n_{ik}=n}^{(j_s+1)} \sum_{n_{ik}=n}^{(j_s+1)} \sum_{n_{ik}=n}^{(j_s+1)}$$

$$\frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s - s - j_s)!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - l_k - j_s^s - s - j_s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$\frac{(l_s - l - 1)!}{(l_s - j_s - l + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}{(D + j^{sa} - n - l_i - j_{sa})! \cdot (n + j_{sa} - j^{sa} - s)!}$$

$$((D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D > n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \vee$$

$$(D \geq n < n \wedge l = l \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} \wedge$$

$$j_s + j_{sa} \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^i, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\}$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$f_z S_{j_s, j_{sa}}^{DOST} = \left( \sum_{k=i}^{\mathbb{k}} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_i-j_{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!}$$

$$\frac{(D + j_{sa} - l_{sa} - s)!}{(D + j_{sa} - n - l_{sa})! \cdot (n - s)!} \Bigg) +$$

$$\left( \sum_{k=i}^{\mathbb{k}} \sum_{(j_s=1)}^{(\cdot)} \sum_{j_{sa}=j_{sa}+1}^{l_{sa}-i+1} \right)$$



$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_i-j^{sa}-\mathbb{k}+1)}$$

$$\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa} - 1)!}$$

$$\frac{(l_{sa} - l_s - j_{sa} - 1)!}{(l_{sa} - j^{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D + j_{sa} - l_i - s)!}{(D + j^{sa} - n - l_{sa})! \cdot (n_{sa} - j^{sa} - \mathbb{k} - 1)!} \cdot$$

$$\sum_{k=i}^{\mathbb{k}} \sum_{l=0}^{\mathbb{k}-k} \sum_{a=j_{sa}}^{j_{sa}+k}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_i+\mathbb{k}} \sum_{n_{sa}=n_i+j_{sa}-j^{sa}-\mathbb{k}+1}^{n_{sa}=n_i+j_{sa}-j^{sa}-\mathbb{k}+1} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}}$$

$$\frac{(n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}{(n_{ik} + j_{sa}^{ik} - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n + \mathbb{k} \wedge l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j^{sa} - j_{sa} - 1 \wedge$$

$$j_{sa} + j_{sa} - 1 \leq j^{sa} \leq n - j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 \leq n_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n \wedge$$

$$D \geq n < n + \mathbb{k} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$fz S_{j_s, j^{sa}}^{DOST} = \sum_{k=i}^{( )} \sum_{l=1}^{( )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{sa}=n-j^{sa}-l_k)}^{(n_i-j^{sa}-l_k+1)}$$

$$\frac{(n_i - n_{sa} - l_k - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - l_k + 1)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - l_k - 1)! \cdot (n_i + j^{sa})!}$$

$$\frac{(D + j_s - l_{sa} - s)!}{(D + j_{sa} - n - l_k - s)! \cdot (n - s)!}$$

$$\sum_{k=i}^{( )} \sum_{l=1}^{( )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=n+l_k}^{( )} \sum_{(n_{sa}=n-j^{sa}-l_k)}^{( )} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-l_k}$$

$$\frac{(n_i + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - l_k)!}{(n_{ik} + j^{sa} - j_{sa}^{ik} - n - j_{sa} - l_k - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{sa} - j_{sa} + 1 > l_s \wedge$$

$$l_{sa} \leq D + j_{sa} - n \wedge l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$(D \geq n < n \wedge l = l_i \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j^{sa} - j_{sa} + 1 \wedge$$

$$j_s + j_{sa} - 1 \leq j^{sa} \leq n + j_{sa} - s \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{s-1} - j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \vee s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 f_z S_{j_s, j^{sa}}^{DOST} &= \sum_{k=i}^l \sum_{(j_s=1)}^{( )} \sum_{j^{sa}=j_{sa}}^{l_{sa}-i^{l+1}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n-j^{sa})}^{(n_i-j^{sa}-\mathbb{k}+1)} \\
 &\quad \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \\
 &\quad \frac{(n - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
 &\quad \frac{(l_{sa} - i_{sa} - j_{sa} + 1)!}{(l_{sa} - i_{sa} - l_s + 1)! \cdot (j^{sa} - j_{sa})!} \\
 &\quad \frac{(D + j^{sa} - l_{sa})!}{(D + j^{sa} - n - l_{sa})! \cdot (n + j^{sa} - j_s - s)!} \\
 &\quad \sum_{k=i}^l \sum_{(j_s=1)}^{( )} \sum_{j^{sa}=j_{sa}} \\
 &\quad \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{sa}=n_i+j_{sa}-j^{sa}-j_{sa}^{ik}+1)}^{( )} \sum_{n_{sa}=n_{ik}+j_{sa}^{ik}-j_{sa}-\mathbb{k}} \\
 &\quad \frac{(n_{ik} + j^{sa} + j_{sa}^{ik} - j_{sa} - j_s - s - \mathbb{k})!}{(n_{ik} + j^{sa} + j_{sa}^{ik} - n - j_{sa} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \\
 &\quad \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

GÜLDÜMÜŞA

## DİZİN

## B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2/230-231

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/187-188

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.1.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.4.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.4.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.1.4.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.4.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.4.1/1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu

bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.3.1/3-4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.1.1.1.1/1

tek kalan düzgün simetrik olasılık,  
2.3.3.2.1.1.1.1/80

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin durumuna bağlı

tek kalan simetrik olasılık,  
2.3.3.1.1.1.2.1/118

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 bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6

tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.2.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.2.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.2.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.2.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.2.1/5-6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.4.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.4.3.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.1.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.2.1/5-6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.6.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.6.3.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.1.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.1.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.2.1/6

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.2.1/4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık,  
2.3.3.1.6.7.3.1/5

tek kalan düzgün simetrik olasılık,  
2.3.3.2.6.7.3.1/3-4

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.6.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
herhangi bir ve son durumunun  
bulunabileceği olaylara göre herhangi bir  
ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.1.1.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi bir ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık,  
2.3.3.1.9.1.2.1/7

tek kalan düzgün olmayan simetrik  
olasılık, 2.3.3.3.9.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu 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 bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10



tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son

durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

VDOİHİ’de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ’de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumu simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ’nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde diğer kaynak kullanılmamıştır.