

# VDOİHİ

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

Cilt 2.3.1.3.10.1.1.1410

İsmail YILMAZ

**Matematik / İstatistik / Olasılık**

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**VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı toplam düzgün olmayan simetrik olasılık Cilt 2.3.1.3.10.1.1.1410**

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## **KÜTÜPHANE BİLGİLERİ**

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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

$I$ : simetrimin bağımsız durum sayısı

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

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

$lk$ : 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 bulunduğu, bağımsız durumdan önceki bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

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

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

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

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

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

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

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

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

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

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

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

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

$D$ : bağımlı durum sayısı

$D_i$ : olayın durum sayısı

$s$ : simetrinin bağımlı durum sayısı

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

$m$ : olasılık

$M$ : olasılık dağılım sayısı

$U$ : uyum eşitliği

$u$ : uyum derecesi

$s_i$ : olasılık dağılımı

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

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

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

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

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

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

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

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

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

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

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

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

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

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$f_Z S_{j_s,j^{sa},D}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu

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

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

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$f_{z,0}S_{j_{ik},j}^{sa}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin herhangi iki durumuna bağlı simetrik olasılık

$f_{z,0}S_{j_{ik},j}^{sa,0}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin herhangi iki durumuna bağlı simetrik olasılık

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$f_{z,0}S_{j_{ik},j_i}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin her durumunun bulunabileceği olaylara göre simetrik olasılık

$f_{z,0}S_{j_{ik},j_i,0}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin her durumunun bulunabileceği olaylara göre simetrik olasılık

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

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$fz_0 S_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık

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

simetrisinin son durumunun bulunabileceği olaylara göre toplam düzgün simetrik olasılık

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

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

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

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

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

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

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

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

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

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$f_z S_{j_i, 0}^{DOSD}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız

simetrinin son durumunun bulunabileceği olaylara göre toplam düzgün olmayan simetrik olasılık

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

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

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

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olaylara göre toplam düzgün olmayan simetrik olasılık

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

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

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

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

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

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

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

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$fzS_{\Rightarrow j_s, j_{ik}, j_i, 0}^{DOSD}$ : 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 toplam düzgün olmayan simetrik olasılık

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

durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

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herhangi bir ve son durumuna bağlı toplam düzgün olmayan simetrik olasılık

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

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$fz,0S_{\Rightarrow j_s, \Rightarrow j_{ik}, j^{sa}, j_i, D}^{DOSD}$ : bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz



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

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

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

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# E2

## BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

### Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

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

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

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

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

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

**SİMETRİDEN SEÇİLEN DÖRT DURUMDAN SON İKİ DURUMA BAĞLI TOPLAM DÜZGÜN OLMAYAN SİMETRİK OLASILIK**

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

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

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

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

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

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

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

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

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

$$S_{\Rightarrow j_s, j_{ik}, j_s}^{DOSD} = \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)}$$

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

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

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

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

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

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

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{l_{ik}-1} \sum_{l_{sa}=l_{ik}}^{(n_{sa}-l_{ik})} \sum_{j_i=l_{ik}+j_{sa}^{ik}-k-s+2}^{(n_{sa}-l_{ik})} \\
& \sum_{n_i=n+l_k}^{(n_{is}+1)} \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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

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

$$\sum_{k=i}^{( )} \binom{( )}{j_s=1}$$

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

$$\sum_{n_{ik}=j_{ik}+1}^{n_i-j_{ik}+1} \sum_{n_{sa}=j_{sa}+1}^{n_{sa}-j_{sa}+1} \sum_{n_s=j_s+1}^{n_s-j_s+1} \binom{( )}{n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_1}} \binom{( )}{n_{sa}+j_{sa}-n_s-j_i-l_{k_2}}$$

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

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

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

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

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

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

$$\sum_{k=1}^{i-l-1} \binom{( )}{j_s=j_{ik}+l_s-l_{ik}}$$

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

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

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

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

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

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

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

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

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

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

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

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

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



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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{j_s=j_{ik}-s-\mathbb{l}_{ik}}^{i-1} \sum_{j_{sa}=j_{sa}^i-1}^{(j_{sa}^i)} \sum_{j_{ik}=j_{sa}^i-1}^{(j_{sa}^i)} \sum_{j_i=j_{sa}^i-1}^{(j_{sa}^i)} \sum_{n_i=n+\mathbb{k}}^{(j_{sa}^i+j_{sa}^i-j_{sa}-j_{ik})} \sum_{n_{sa}=n-j_{sa}+1}^{(j_{sa}^i+j_{sa}^i-j_{sa})} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{sa}^i+j_{sa}^i-j_{sa}-\mathbb{l}_{ik}-j_{ik})} \sum_{n_s=n-j_i+1}^{(j_{sa}^i+j_{sa}^i-j_{sa}-\mathbb{k}_2)} \sum_{n_{is}=n_{sa}-j_{sa}+1}^{(j_{sa}^i+j_{sa}^i-j_{sa}-\mathbb{k}_2)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(j_{sa}^i+j_{sa}^i-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(j_{sa}^i+j_{sa}^i-j_{sa}-\mathbb{k}_2)} \right) \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^i - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa}^i - 1)! \cdot (n_{sa} + j_{sa}^i - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(\mathbb{l}_s - k - 1)!}{(\mathbb{l}_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(\mathbb{l}_{sa} + j_{sa}^{ik} - \mathbb{l}_{ik} - j_{sa})!}{(j_{ik} + \mathbb{l}_{sa} - j_{sa}^i - \mathbb{l}_{ik})! \cdot (j_{sa}^i + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+j_{sa}-k-s+2}^{l_{sa}+s-k-j_{sa}} \\
& \sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{ik}+1}^{n_{is}+j_{sa}-l_{ik}-l_{k1}} \\
& \sum_{n_{sa}=n-j_i+1}^{(n_{ik}+j_{ik}-l_{k2})} \sum_{n_{sa}+j^{sa}-j_i+1}^{(n_{sa}+j^{sa}-j_i+1)} \\
& \frac{(n_{is}-1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-l_{k2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k2})!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()}
\end{aligned}$$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{l_{ik}+j_{sa}^{ik}-k-s+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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

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

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

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

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

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s) \cdot (j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s) \cdot (j_i - n - l_k - l_k - j_{sa}^s)!}$$

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

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

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

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i=s}^{( )}$$

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

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{(\cdot)}{n_s=n_{sa}+j^{sa}-j_i}} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - \dots)!}$$

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{\binom{(\cdot)}{j_s=j_{ik}+l_s-l_{ik}}}$$

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

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

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

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

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



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

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

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

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

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

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

$$\sum_{j_s=j_{ik}+l_s-l_{ik}}^{i-1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{i-1}$$

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

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

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

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

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

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

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

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

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

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{lk}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{\binom{(\cdot)}{j_i=s+1}}^{l_s+s-k} \\
 & \sum_{n_i=n+lk}^n \sum_{\binom{(\cdot)}{n_{is}=n+lk-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \\
 & \sum_{\binom{(\cdot)}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2}}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot lk_1 - n_s - j_s - s - lk - lk)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot lk_1 - n_s - j_i - n - lk - lk - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n - s - j_s - s)!} \\
 & \frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(D - l_i)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{\binom{(\cdot)}{j_s=1}} \sum_{\binom{(\cdot)}{j_i=s}} \\
 & \sum_{j_{ik}=j_{sa}^{lk}} \sum_{\binom{(\cdot)}{j^{sa}=j_{sa}}} \sum_{j_i=s} \\
 & \sum_{n_i=n+lk}^n \sum_{\binom{(\cdot)}{n_{ik}=n_i-j_{ik}-lk_1+1}} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-lk_2} \sum_{\binom{(\cdot)}{n_s=n_{sa}+j^{sa}-j_i}} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot lk_1 - n_s - j_s - j_i - s - lk - lk)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot lk_1 - n_s - j_i - n - lk - lk - j_{sa}^s)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

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

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

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

$$\sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{(\quad)} \right)$$

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

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

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

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

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

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

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

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

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

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

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



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

GÜLDÜZYA

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

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

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^i \sum_{j_{sa}=l_{sa}-l_{ik}}^{(i-k)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-l_{sa}-k} (l_{sa}-k)! \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
& \sum_{n_i=n+k}^{(n_{is}+1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n_{is}+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{k=1}^{( )} \binom{( )}{j_s=1}$$

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

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

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

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

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

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

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$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!} \cdot \frac{1}{(j_{sa}^s - j_s - s)!}$$

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j^{sa}=j_{sa})}^{(\cdot)} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOS} = \sum_{k=1}^{i^{l-1}(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{l_s+s-k} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{n} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

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



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

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

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

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

$$\sum_{(n_{sa}=n_{ik}-j_{sa}+1)}^{(n_{sa}+j_{sa}-j_i-l_{k_2})} \sum_{(j_i=1)}^{(j_i+1)}$$

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

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

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

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

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

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

$$\left( \sum_{k=1}^{i l - 1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \right)$$

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

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
& \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
& \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - n - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(j_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s + j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
& \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{i_k}=j^{s_a}+l_{i_k}-l_{s_a}}^{(j_i+j_{s_a}-s-1)} \sum_{(j^{s_a}=j_{s_a}+1)}^{l_{i_k}+s-k-j_{s_a}^{i_k}+1} \sum_{j_i=l_s+s-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

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

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

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

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

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

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

$$\frac{\binom{D - l_i}{D + j_i - n - l_i}}{\binom{D - l_i}{D + j_i - n - l_i}} -$$

$$\sum_{k=0}^{j_i} \sum_{j_{sa}^{ik}+1}^{j_i} \binom{()}{k} \binom{()}{j_{sa}^{ik}+1}$$

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

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

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

$$\frac{(n_{sa} - 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^s)!} \cdot$$

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

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

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

$$\sum_{k=0}^{j_i} \sum_{j_s=1}^{j_s} \binom{()}{k} \binom{()}{j_s}$$

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

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

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

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

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

$D \geq n < n \wedge l = l_k > 0 \wedge$

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

$s: \{j_{sa}^{s-1}, j_{sa}^{ik}, \dots, l_{k_2}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s - l_{k_1} \wedge$

$l_{k_2} = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{SDOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\begin{aligned}
 & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\quad)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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



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

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

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

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

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

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

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

$$\sum_{k=i}^{( )} \sum_{l \geq 1}^{( )}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$f_{z=1}^{DOSD} j_i = \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

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

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

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

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

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

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

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{l_{ik}-1} \sum_{l_{sa}=l_{ik}}^{(n_i - n_{is} - 1)} \sum_{l_{ik}=k}^{(l_{ik} - k + 1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_i+j_{sa}-l_{ik}+1)} \sum_{n_i=n+l_k}^{(n_{is}+1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) n_{sa}+j^{sa}-j_i}{(n_{sa}=n-j^{sa}+1) n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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

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

$$\sum_{k=i}^{( )} \sum_{j_s=1}^{( )} \frac{(l_i + j_{sa} - i^{l-s+1})}{(j_{ik} - j_{sa})! \cdot (j_{ik} - l_{sa})!}$$

$$\sum_{j_{ik}=j_{sa}}^{(l_i + j_{sa} - i^{l-s+1})} \sum_{j_{ik}=j_{sa}}^{(j_{ik} - j_{sa})! \cdot (j_{ik} - l_{sa})!}$$

$$\sum_{n_i=j_{ik}+1}^{(n_i - j_{ik} + 1)} \sum_{n_i=j_{ik}+1}^{(n_i - j_{ik} + 1)}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(l_s - j_s - l_{k_1} + 1)! \cdot (j_s - l_{k_1})!}$$

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_{k_1} - j_{sa}^s)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s}^{DOSD} j_{ik} j_{sa} j_i = \left( \sum_{(j_s = j_{ik} - \mathbb{k}_s - l_{ik})}^{i^{l-1}} \sum_{(j_s = j_{ik} - \mathbb{k}_s - l_{ik})}^{(j_s = j_{ik} - \mathbb{k}_s - l_{ik})} \right)$$

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

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

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

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

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

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

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

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

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



$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}^{ik}-k-s+2)}^{(l_{sa}-k+1)} \sum_{j_{ik}^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+1}^{n_{is}+j_{sa}-l_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j_i)}^{(n_{ik}+j_{ik}-l_{ik_2})} \sum_{(n_{sa}+j_{sa}-j_{ik}^{sa})} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{()}
 \end{aligned}$$

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

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{l_{ik}+j_{sa}^{ik}-k-s+1}{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i}
 \end{aligned}$$

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{( )} \sum_{l=1}^{( )}$$

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}+1} \sum_{j_i=j_{sa}+s-j_{sa}} \sum_{n_i=n+l_k} \sum_{n_s=n_{sa}+j_{sa}-l_{k_1}} \sum_{n_s=n_{sa}+j_{sa}-j_i} \frac{(l_{ik} + j_{sa} - k - s + 1)!}{(n_{ik} + 1)!} \cdot \frac{(n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot j_{sa}^{ik} + 2 \cdot j_{sa} - k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}}^{( )} \sum_{j_i=s}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

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

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

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

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

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



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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_i - l_k - l_k - j^{sa})!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

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

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

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$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_s=2}^{i^{l-1} (l_s - k + 1)}$$

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

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

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

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

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

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

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

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

$$\sum_{k=i}^{( )} \sum_{j_s=1}^{( )} \frac{(l_i + j_{sa} - i^{l-s+1})}{(j_{ik} = j_{sa} + l_{ik} - l_{sa})} \frac{(n_i - j_{ik} + 1)}{(j_{ik} = j_{sa})} \frac{(n_{sa} - j_{ik} - l_{sa})}{(j_{ik} = j_{sa})}$$

$$\sum_{j_{ik} = j_{sa} + l_{ik} - l_{sa}}^{(l_i + j_{sa} - i^{l-s+1})} \sum_{(j_{ik} = j_{sa})}^{(n_i - j_{ik} + 1)} \sum_{(j_{ik} = j_{sa})}^{(n_{sa} - j_{ik} - l_{sa})}$$

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

$$\sum_{n_{sa} = j_{ik} - j_{sa} + l_{sa}}^{(n_{sa} - j_{ik} - l_{sa})} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} - j_{ik} - l_{sa})}$$

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_{k_1} - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_{k_1} - j_{sa}^s)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{(j_s = j_{ik} - \mathbb{k}_s - \mathbb{l}_{ik})}^{i \mathbb{l} - 1} \sum_{(j_s = j_{ik} - \mathbb{k}_s - \mathbb{l}_{ik})}^{( )} \right)$$

$$\sum_{(j_s = j_{ik} - \mathbb{k}_s - \mathbb{l}_{ik})}^{j_{sa} + j_{sa}^{ik} - j_{sa} - (j_s - j_{sa} - k)} \sum_{(j_s = j_{sa} + \mathbb{k}_s - j_{sa} - j_s)}^{j_{ik} - j_{sa} - \mathbb{k}_s - j_{sa} - j_s} \sum_{(j_s = j_{sa} + \mathbb{k}_s - j_{sa} - j_s)}^{(j_s - j_{sa} - \mathbb{k}_s - j_{sa} - j_s)}$$

$$\sum_{(j_s = j_{sa} + \mathbb{k}_s - j_{sa} - j_s)}^{(j_s - j_{sa} - \mathbb{k}_s - j_{sa} - j_s)} \sum_{(j_s = j_{sa} + \mathbb{k}_s - j_{sa} - j_s)}^{(j_s - j_{sa} - \mathbb{k}_s - j_{sa} - j_s)}$$

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

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

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \binom{l_{sa}-i_{l+1}}{(j_{sa}=j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}} \binom{n_i-j_{ik}+1}{(n_{ik}=n+\mathbb{k}-j_{ik})} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j_{sa}+1} \binom{n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_1}{(n_{sa}+j_{sa}-j_i-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(n_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{i_{l-1}} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{(l_s+j_{sa}-k)}{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i}
 \end{aligned}$$



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

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

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

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

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

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

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

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

$$\sum_{k=i}^{( )} \sum_{l}^{( )}$$

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_k - l_{k1})!}{(2 \cdot j_{sa}^{ik} + 2 \cdot j_{sa}^{ik} - l_{k1} - n_s - j_i - n - l_k - l_{k1} - j_{sa}^{ik})!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}^{ik}=j_{sa})} \sum_{j_i=s}$$

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

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

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

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

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

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

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

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

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

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

$$fz \mathcal{S}_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

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

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

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

$$\sum_{j_s=1}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}^{ik}-l_{sa})}^{(l_s+j_{sa}-k)} \sum_{n_i=n+1}^n \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{ik}-j_s-1)}^{(n_{ik}-j_s-1)} \sum_{(n_{sa}-n_s-1)}^{(n_{sa}-n_s-1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{i_1}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j_{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{i_1}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{i_1}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s+1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

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

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

$$\sum_{k=i}^{\binom{D}{i}} \sum_{(j_s=1)}$$

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

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}}{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

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

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

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

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

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

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

$$\sum_{k=0}^{i-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{j_s+j_{sa}-k}$$

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

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

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

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

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

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

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

$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i}^{( )}$$

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

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

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

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

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

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

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

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

$D \geq n < n \wedge l = l_{k_1} + l_{k_2} \wedge$

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

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

$s > 4 \wedge s = l_{k_1} + l_{k_2} \wedge$

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

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

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



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}}^{(l_i+j_{s_a}-l-s+1)} \sum_{(j^{s_a}=j_{s_a})} \sum_{j_i=j^{s_a}+l_i-l_{s_a}}$$

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

$$\sum_{n_{s_a}=n+l_{k_2}-j^{s_a}+1}^{n_{i_k}+j_{i_k}-j^{s_a}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{s_a}+j^{s_a}-j_i-l_{k_2})}$$

$$\begin{aligned}
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{i=0}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_{ik}=j_{sa}}^{l_{ik}-k+1} \sum_{(j_i=j_{sa}+l_i-l_{sa})} \\
& \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
& \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

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

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

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

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

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

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

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

$$D \geq n < n - l = l_{k_1} \wedge$$

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

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

$$s > 4 \wedge s = l_{k_1} + l_{k_2} \wedge$$

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

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(i)} \right)$$

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

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

$$\sum_{k=1}^{( )} \sum_{l=1}^{( )}$$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s) \cdot (j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s) \cdot (j_i - n - k - k - j_{sa}^s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i=s}^{( )}$$

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

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{\binom{(\cdot)}{j_s=j_{ik}+l_s-l_{ik}}}$$

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{i-1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{lk} + 2 \cdot k_1 - n_s) \cdot (j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{lk} + 2 \cdot k_1 - n_s) \cdot (j_i - n - k - k_1 - j_{sa}^s)!}$$

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

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

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

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik} = j_{sa}^{ik}} \sum_{(j_{sa} = j_{sa})}^{( )} \sum_{j_i = s}$$

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

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{(j_s)} \binom{(\cdot)}{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_i + j_{sa}^{ik} - i^{l-s+1}}$$

$$\sum_{j_{ik} + l_{sa} - l_i = j_{sa} + l_i - l_s}$$

$$\sum_{n_i=0}^n (n_{ik} = n + k - j_{ik} + 1)$$

$$n_{ik} + j_{sa} - k_1 (n_{sa} + j_{sa} - j_i - k_2)$$

$$\sum_{n_{sa}=0}^{j_{sa} - j_{sa} + 1} (n_s = n - j_i + 1)$$

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

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

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

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

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

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)}$$

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

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

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

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

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

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

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

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

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

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

$$f_{z \Rightarrow j_s, j_{sa}^{ik}}^{DOS} = \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{j_i=j_{sa}^{ik}+s-j_{sa}}^{(l_{sa}-1)} \sum_{n_i=n+k}^{(n_{is}+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \frac{\sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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

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

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

$$\sum_{k=1}^{i-1} \binom{()}{j_s=1}$$

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

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

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

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

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

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

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

$$\left( \sum_{k=1}^{i-1} \binom{()}{j_s=j_{ik}+l_s-l_{ik}} \right)$$



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

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n_s - j_i)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
& \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
& \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}
\end{aligned}$$

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

$$\sum_{k=1}^{(\dots)} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=\dots} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\dots} \sum_{(n_{ik}=n_i - j_{ik} - k_1 + 1)}$$

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + \dots - k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - \dots - j_i - n - k - k - j_{sa}^s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

$$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

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

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

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

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

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

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

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

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

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

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

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

$$\sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}$$

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

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{i_s} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n + \mathbb{k}_2 - j_{i_k} + 1}^{n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1} \\
 & \sum_{n_{s_a} = n - j^{s_a} + 1}^{(n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{s_a} + j^{s_a} - j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - n - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{i=1}^{( )}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{i_k} = j_{s_a}^{i_k}}^{l_{i_k} - i^{l+1}} \sum_{(j^{s_a} = j_{i_k} + l_{s_a} - l_{i_k})}^{( )} \sum_{j_i = j^{s_a} + s - j_{s_a}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{i_k} = n + \mathbb{k} - j_{i_k} + 1}^{(n_i - j_{i_k} + 1)} \\
 & \sum_{n_{s_a} = n + \mathbb{k}_2 - j^{s_a} + 1}^{n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_1} \sum_{n_s = n - j_i + 1}^{(n_{s_a} + j^{s_a} - j_i - \mathbb{k}_2)}
 \end{aligned}$$

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

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

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

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

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

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

$$\sum_{j_{ik}=0}^{l_{ik}-k+1} \sum_{j_{sa}^{ik}=k-1}^{j_{ik}+l_{sa}-l_{ik}} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \sum_{j_s=2}^{l_s-k+1}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{l_i - l_s} \sum_{j_s=1}^{l_i - l_s - k} \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik} - i + 1} \sum_{n_{ik}=n+k-j_{ik}+1}^{n} \sum_{n_{sa}=n_{sa} - j_{sa}^{ik} - k_1}^{n_{sa} + j_{sa} - j_i - k_2} \sum_{n_s=n-j_i+1}^{n_{sa} - j_{sa}^{ik} - k_2 - j_{sa}^{ik} + 1}$$

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

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

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$fz^S \Rightarrow j_s \Rightarrow j_{sa}, j_i = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

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

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

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

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

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

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

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

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!} \cdot \\
 & \frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{l-1} \frac{(l_s - k + 1)!}{(j_s - 2)!} \cdot \\
 & \sum_{j_{ik}=0}^{l_{ik}-k+1} \sum_{j_{sa}^{ik}=0}^{(l_i + j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i=j_{sa}^{ik} + l_i - l_{sa}}^{(n - j_s + 1)} \sum_{n_{is}=n+k}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n - j_s + 1)} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{sa}+j_{sa}^{ik}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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

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

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

$$\sum_{k=0}^{l_i} \sum_{j_s=1}^{(n-k)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{j_i=0}^{(l_i+j_{sa}^{ik}-j_s+1)} \sum_{j_{sa}=0}^{(j_{sa}^{ik}-j_{sa}+l_i-l_{sa})}$$

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

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

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

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

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

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

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

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

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

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

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

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

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

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

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}$$

GÜLDÜZYA

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned} f_{z \Rightarrow j_s, j_{ik}}^{DOS} \cdot j_i &= \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\ &\sum_{(j_{ik}+l_{ik}-l_s)}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \end{aligned}$$

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

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

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

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

$$\sum_{k=i}^{j_s} \binom{j_s}{k}$$

$$\sum_{j_{ik}=0}^{n-i} \binom{l-s+1}{j_{ik}} \binom{j_{sa}}{j_{sa}-j_{ik}} \quad j_i = j^{sa} + l_i - l_{sa}$$

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

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

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

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

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

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

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

GÜLDÜZÜM

$$\begin{aligned}
 & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik-k-j_{sa}^{ik}+2})} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j_{sa}+l_i-} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})}^{( )} \sum_{n_s=n_{sa}+j_{sa}^{s_2}} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n_{sa} + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{( )} \sum_{(j_{sa}=j_{sa})}^{( )} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2}}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}
 \end{aligned}$$

GÜLDÜNYA



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

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

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

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

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

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

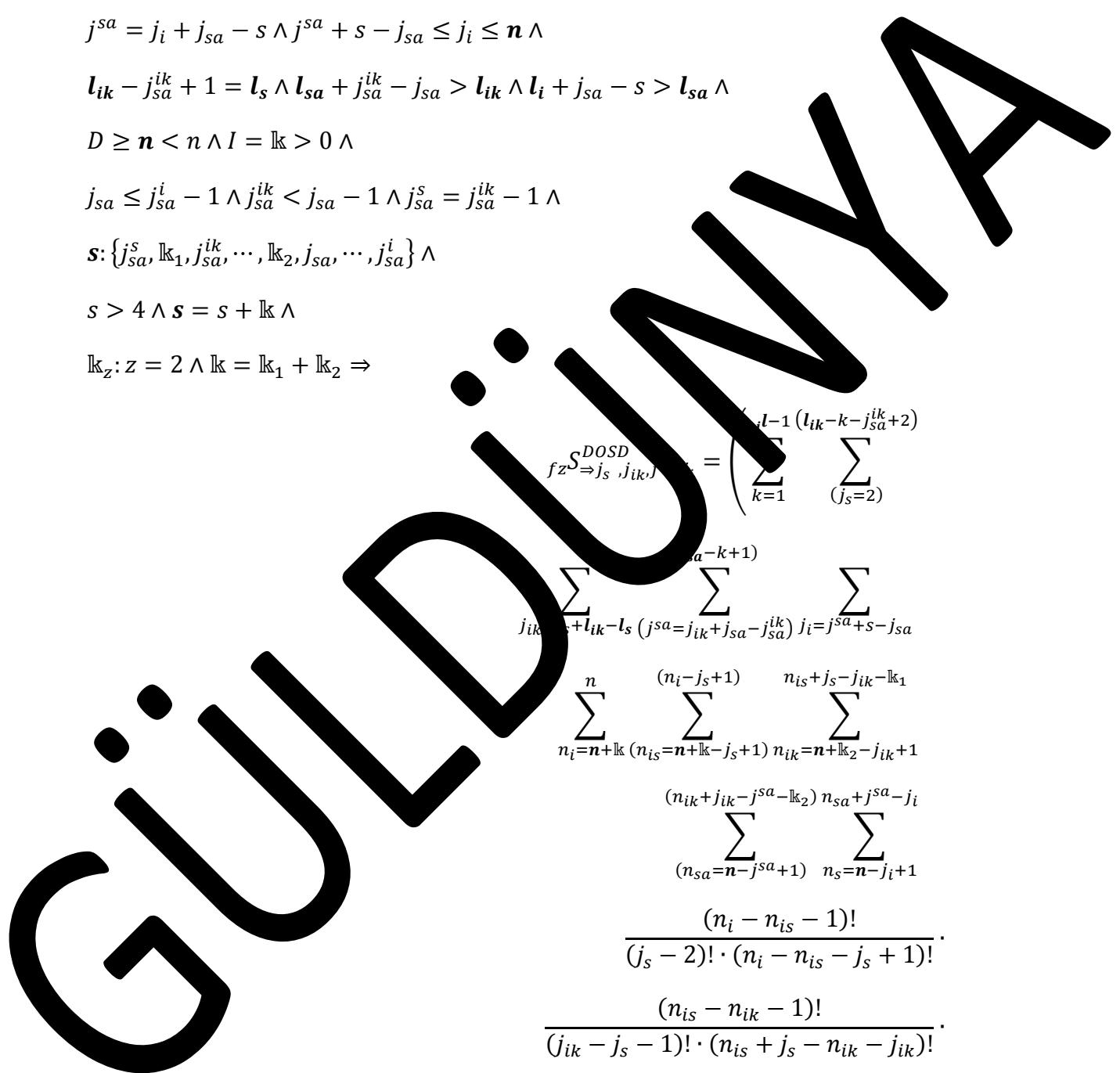
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

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

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

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

$$fzS_{\Rightarrow j_s, j_{ik}, j_{sa}}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{ik}^{sa}+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}^{(a-k+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \right)$$



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

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

GÜLDÜZMAYA

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

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

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

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

GÜLDENWA

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

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

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

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

$$\sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

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

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

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

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

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

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

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

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

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

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

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

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

$$fz S_{\Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=2, \dots, l-k+1)}^{l-k+1} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa})}^{(n_i-j_s)} \sum_{(i=j_{sa}+j_{ik}-l_{sa})}^{(n_{is}+j_s-j_{ik})} \sum_{(n_i=n+1)}^n \sum_{(j_s+1)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{sa}=n+1)}^{(n_{sa}=n+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i+j_{sa}-i^{l-s+1})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+l_i}$$

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

$$n_{ik}+j_{ik}-j^{sa}-k_1 \quad (n_{is}=n_i-j_{ik}+1-k_2)$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}} \sum_{(n_s=n-j_i+1)}$$

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

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

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

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

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

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

$$\sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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

GÜLDÜZMAYA

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

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

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

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

$$\frac{(D - l_i - 1)!}{(D + j_i - 1 - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$\sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D > n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$



$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2, \dots, l_s-k+1)}^{l_s-k+1} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+l_{sa})}^{(j_{sa}=j_{ik}+l_{sa})} \sum_{n_i=n_i+1}^n \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{ik}-j_s-1)}^{(n_{ik}-j_s-1)} \sum_{(n_{sa}=n_{sa}+1)}^{(n_{sa}=n_{sa}+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜSÜNYA

$$\sum_{k=1}^i \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$n_{ik}+j_{ik}-j^{sa}-k_1 \quad j^{sa}-k_2$$

$$\sum_{n_{sa}=n+k_2-j^{sa}}^{( )} \sum_{(n_s=n-j_i+1)}^{( )}$$

$$\frac{(n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_i-j_{ik}+1)!}$$

$$\frac{(n_{sa}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_i+j_{ik}-j^{sa}-k_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_{ik}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{( )}$$

GÜLDENWA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$\sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{DOSD} j_{ik} j_{sa} j_i = \left( \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+\mathbb{k}_1-l_s}^{(l_{sa}-k+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})}^{(j_{sa}-j_{sa})} \sum_{(j_{sa}-j_{sa})}^{(j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{(j_{sa}-j_i)}^{(j_{sa}-j_i)}$$

$$\sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜZYA

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n-l-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_{is}=n-l-k_2)}$$

$$\sum_{n_{sa}=n+l-k_2-j^{sa}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_i-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_i-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\left( \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{is}=n+l-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(j_i+j_s-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}-l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{l}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=j_{sa})}^{l_i-i^{l+1}} \sum_{j_i=j^{sa}+s-j_{sa}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

GÜLDENKA

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=n_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZ

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-l_{ik}+1)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}} \sum_{(n_s=n_{sa}+j^{sa})}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - s - l_{ik})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - l_{ik} - s - l_{ik})! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-l_{ik}-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: l_{k_2} \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{\binom{D}{i}} \sum_{l=1}^{\binom{D}{j_s}}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{i_k}=j_{s_a}^{i_k}}^{l_{i_k}-i^{l+1}} \sum_{(j^{s_a}=j_{i_k}+l_{s_a}-l_{i_k})}^{\binom{D}{j_s}} \sum_{j_i=j^{s_a}+s-j_{s_a}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{(n_i-j_{i_k}+1)} \\
 & \sum_{n_{s_a}=n+l_{k_2}-j^{s_a}+1}^{n_{i_k}+j_{i_k}-j^{s_a}-l_{k_1}} \sum_{n_s=n-j_i+1}^{(n_{s_a}+j^{s_a}-j_i-l_{k_2})}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - 1)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{k=1}^{l_i - k + 1} \sum_{(j_s=2)}^{l_i - k + 1} \right) \\
 & \sum_{j_{ik}^{ik} + j_{sa}^{ik} - 1}^{l_i - k + 1} \sum_{j_{ik} + l_{sa} - l_{ik}}^{l_i - k + 1} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_i=1}^{(l_i-1)} \sum_{j_s=1}^{(j_i-1)} \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i} \sum_{(j^{sa}=j_{sa}^{ik})}^{(l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-i} \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{j^{sa}=j_i+l_{sa}-l_{ik}} \sum_{j_i=j_{sa}-j_{sa}} \sum_{k=1}^{i^{l-1}(l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s) \cdot (j_s - j_i - s - l_{k_1} - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s) \cdot (j_i - n - l_{k_1} - l_{k_1} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=i}^{\binom{()}{l}} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{()}{l}}$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{()}{n_s=n_{sa}+j^{sa}-j_i}} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\begin{aligned}
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - j^{sa} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - j_{sa}^{ik} - 1)! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i}^{(\quad)} \sum_{l=j_s=1}^{(\quad)} \\
& \sum_{j_{ik}=j_{sa}^{lk}}^{i-k-i+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(l_i+j_{sa}-i-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{j_i} \sum_{(j_s=2)}^{(j_s=k+1)}$$

$$\sum_{j_{ik}=j_s+j_s-1}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_{is}+lk}^n \sum_{(n_{is}=n+j_s+1)}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot lk_1 - n_s - j_s - j_i - s - lk - lk)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot lk_1 - n_s - j_i - n - lk - lk - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}=j_{sa})}^{( )} \sum_{j_i=s}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s) \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$

$s > 4 \wedge s = s + \mathbb{k}$

$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{j_i + l_{ik} - l_i - j_{sa}^{ik} + 1} \binom{()}{j_s = j_{ik} + l_s - l_{ik}} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{-k+1} \binom{()}{j^{sa} = j_i + l_{sa} - l_i} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \binom{(n_i - j_s + 1)}{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(D + j_s - n - l_i)! \cdot (j_s - l_i)!} + \\
 & \sum_{k=D+l_{ik}+1}^{i^{l-1}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(n_{is}+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \binom{( )}{j_s=1}$$

$$\sum_{j_{ik}=j_{sa}^{ik} (j^{sa}=j_i+l_{sa}-l_i)}^{( )} \binom{( )}{j_s=1} \binom{( )}{j_s=1} \binom{( )}{j_s=1}$$

$$\sum_{n_{ik}=j_{sa}^{ik} (j^{sa}=j_i+l_{sa}-l_i)}^{( )} \binom{( )}{j_s=1} \binom{( )}{j_s=1} \binom{( )}{j_s=1} \binom{( )}{j_s=1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{( )}{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{( )}{j^{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

GÜLDÜZYAZ

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1) \cdot (k - j_{sa})!}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - s + 1)! \cdot (j_s - s)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}$$

$$\frac{(D - n)!}{(D - n)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)!} \cdot \frac{(n - j_i)!}{(n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s > l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i - k_1, j_{sa}^{ik}, \dots, j_{sa}^i - k_2, \dots, j_{sa}^i\}$$

$$j_{sa}^i > 4 \wedge j_{sa}^i - s + k \wedge$$

$$k_2: z - 2 \wedge k_1: z - 2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{i_k}+s-n-l_i-j_{s_a}^{i_k}+1} \sum_{(j_s=j_{i_k}+l_s-l_{i_k})}^{( )} \\
 & \sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_{i_k}-k+1} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{( )} \sum_{j_i=l_{i_k}+s-k-j_{s_a}^{i_k}+2}^{l_{s_a}+s-k-j_{s_a}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

GÜLDÜŞMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(n_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{l_{sa}+s-l_i-j_{sa}+1} \sum_{\binom{()}{j_s=j_{ik}+l_s-l_{ik}}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{\binom{()}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{\binom{D+l_i+n-l_i}{(D+j_i) \cdot (n-l_i)!} + \binom{D+l_i+s-n-l_i-j_{sa}}{\sum_{k=1}^{j_{sa}} \binom{()}{l_s-l_{ik}}} \cdot \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}} \sum_{(j_i+j_{sa}^{ik}-1) \cdot l_{ik}+s-k-j_{sa}^{ik}+1}{(j_i-j_{sa}^{ik}+n-D)} \sum_{j_i=l_i+n-D}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{n_i=n+k}^{(n_{is}+1)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2) \cdot n_{sa}+j^{sa}-j_i} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}{j_s=j_{ik}+l_{sa}-l_{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j_{sa}=l_{sa}+n-D}^{(j_i+j_{sa}-1)} \sum_{j_{sa}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k+1}$$

$$\sum_{n_i=n+l_{sa}+s-k-j_{sa}^{ik}+2}^n \sum_{n_{is}=n+l_{sa}+s-k-j_{sa}^{ik}+2}^{n-l_{sa}+s-k-j_{sa}^{ik}+2} \sum_{n_{ik}=n+l_{sa}+s-k-j_{sa}^{ik}+2}^{j_{ik}-l_{k_1}}$$

$$\sum_{j_{sa}=n-j_{sa}^{ik}+1}^{n+l_{sa}+s-k-j_{sa}^{ik}+2} \sum_{n_s=n-j_{sa}^{ik}+1}^{n+l_{sa}+s-k-j_{sa}^{ik}+2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$



$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k+1}^{n_{is}+j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-k)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n-j_i+1)}^{(n_{sa}+j^{sa}-k_2)} \\
 & \frac{(n - n_{is} - 1)!}{(n - 2)! \cdot (n - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n - n_{ik} - 1)!}{(n - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \\
 & \sum_{j_{ik}=j_{sa}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \frac{(n_{ik}+j_{ik}-k_2) \cdot (n_{sa}+j_{sa}-j_i)}{(n_{sa}=n-k_2+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad}
 \end{aligned}$$

GÜLDENREINER

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k1} \\ n_{ik}=n+l_{k2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j_{sa} - l_{ik}} \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{\substack{(l_{sa}-i^{l+1}) \\ (j^{sa}=l_{sa}+n-D)}} \sum_{\substack{l_i-i^{l+1} \\ j_i=l_i+n-D}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \sum_{n_{sa}=\mathbf{n}+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_i - j_{sa})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (l_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(\mathbf{n} + j_{sa}^s - j_s - s)!}
 \end{aligned}$$

GÜLDÜZMÜNYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

 $fz \xrightarrow{DOSD} j_s, j_{ik}, j_{sa}^i$ 

$$= \sum_{k=1}^{n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa})!} \cdot \\
 & \frac{(l_i - l_j)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j^{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_s+s-k+1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i-1} \sum_{j_s=j_{ik}-l_{ik}}^{( )} \sum_{j_{ik}=l_i+n-D}^{( )} \sum_{j_{sa}=n-j^{sa}+1}^{( )} \sum_{n_s=n-j_i+1}^{( )} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDÜNYA



$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l_i}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{l_i-n-D}^{l_i-l_i}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_i-l_{sa})}^{( )} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

GÜLDÜZÜMÜYA

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - 1)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{1, \dots, k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^i\}$$

$$s > 4 \wedge j_{sa}^i = s + k \wedge$$

$$k_2: z = 2 \wedge k_2 = k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{S_{DOSD}}(j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\quad)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜŞMAYA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{j_s=2}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_s}^{(l_i-1)} \sum_{j_s=1}^{(l_i-1)} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZYA

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(\quad)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(\quad)} \sum_{j_i=l_i+n}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{i_k}+j_{ik}-l_{k_2})}^{(\quad)} \sum_{n_s=n_{sa}+j_s}^{(\quad)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_i - j_i - l_{k_1} - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_i - j_i - l_{k_1} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{1}{(n_{sa} + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - l_{sa} \wedge j^{sa} + s - j_{sa} \leq n \wedge$

$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n - l_i \leq D + j_i + s - n - j_{sa} \wedge$

$D > n \wedge l = l_{k_1} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + l_{k_1} \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$\begin{aligned}
 f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} = & \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n-l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \binom{(n_{ik}+j_{ik}-j_{sa})}{(n_{sa}=n-l_k-j_{ik}+1)} \binom{(n_{sa}-j^{sa}-j_i)}{(n_s=n-j_i)} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \cdot \\
 & \frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(\quad)}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDÜSÜZ



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(j_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_{sa} - l_i - j_{sa}^{ik} + 1} \binom{(\quad)}{(j_s = j_{ik} + l_s - l_{ik})} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + n - D)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = l_i + n - D}^{l_s + s - k} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
& \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_{ik}=j_s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=l_{sa}-s-1)}^{(j_i=l_{sa}-s-1)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s-k}^{n-l_i-j_s+1} \frac{(l_s + j_{sa}^{ik} - k - 1)!}{(j_{ik} + j_{sa}^{ik} - k - 1)!} \cdot \frac{(n - j_s + 1)!}{(j_s - 2)!} \cdot \frac{(n_{is} + j_s - j_{ik} - k_1)!}{(n_{is} - n_{ik} - 1)!} \cdot \\
 & \sum_{j_{ik}=j_{sa}^{ik}-k}^{n-l_i-j_s+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{n-l_i-j_s+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n-l_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n-l_i-j_s+1} \sum_{n_s=n-j_i+1}^{n-l_i-j_s+1} \frac{(n_{ik} + j_{ik} - j^{sa} - k_2)!}{(n_{sa} + j^{sa} - j_i)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}^k-k} \sum_{(j_i+j_{sa}-s-1)}^{(j_i+j_{sa}-s-1)} \sum_{(j_s=l_{sa}+n-D)}^{(j_s=l_{sa}+n-D)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{()}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{j_{sa}^{sa}=l_{sa}+n-D}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}^{sa}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_2}} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}^{sa}-j_i)!}{(n_{sa}=n+l_{sa}+1) \cdot (n_s=n-j_i)!} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{sa}+j_{sa}^{sa}-j_{ik}-j_{sa}^{sa})!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_{sa}^{sa}-1)! \cdot (n_{sa}+j_{sa}^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}^{sa}-l_{ik})! \cdot (j_{sa}^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \binom{()}{j_s=j_{ik}+l_s-l_{ik}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)!(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-i^{l+1}} \sum_{j_i=l_i+n-D}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

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$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_{j_s, j_{ik}, j^{sa}, j_i}^{SD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_s - l_s - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D - l_s - j_s + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s-j_s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=n+l_{ik}-l_{sa}}^{n+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_s+s}^{D+l_{sa}+s} \sum_{i=n-l_i+1}^{n-l_{sa}+1} \sum_{j_s=0}^{n-l_{sa}+1-k+1} \dots \\
 & \sum_{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} + j_{sa} - s)}^{n-l_{sa}+1} \sum_{j_i=0}^{n-D} \dots \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \dots \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{sa}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \dots \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+ \\
 & \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(j_i+j_{sa}-s-1)} \sum_{(l_i+n-D)}^{l_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_s-1)}^{(n_{is}+j_s-k-k_1)} \\
 & \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_{sa}+j_{sa}-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k}^{n_{is}+j_s-j_{ik}-k} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-k)}^{(n_{ik}+j_{ik}-k)} \sum_{(n_s=n-j_i)}^{n_{sa}-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1) \\ (j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}} \sum_{\substack{l_i-k+1 \\ j_i=l_{ik}+s-k-j_{sa}^{ik}+2}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-n-j_i+1 \\ (n_i-n_{is}-1)}} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2) \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1) \cdot (n_{sa}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{(j_i+j_{sa}-s-1) \\ (j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}} \sum_{\substack{l_{ik}+s-k-j_{sa}^{ik}+1 \\ j_i=l_i+n-D}}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(l_i + j_{s_a} - l_{s_a} - s)!}{(j^{s_a} + l_i - j_i - l_{s_a})! \cdot (j_i + j_{s_a} - j^{s_a} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_s+s-n-l_i-j_s+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j^{s_a}+l_{i_k}-l_{s_a}} \sum_{(j^{s_a}=l_{i_k}+n+j_{s_a}-D-j_{s_a}^{i_k})}^{(l_{i_k}+j_{s_a}-k-j_{s_a}^{i_k}+1)} \sum_{j_i=l_{i_k}+s-k-j_{s_a}^{i_k}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}
 \end{aligned}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-\mathbf{n}-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+\mathbf{n}+j_{sa}-D-j_{sa}^{ik})}^{l_i-k+1} \sum_{j_i=l_i+\mathbf{n}-D}^{l_i-k+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDÜZMÜŞA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s+n-l_i} \sum_{j_i=j_{ik}-j_{sa}^{ik}+1}^{j_i+l_s-k} \sum_{j_{ik}=j_i}^{n} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}=n+k-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(j^{sa}=j_i+j_{sa}-s)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{l_s+s-k} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j^{sa}+j_{sa}^{ik}} \sum_{l_k=l_{ik}+n-D}^{j_{sa}+j_{sa}^{ik}} \sum_{s_a=j_i+l_{sa}-l_i}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{n-(i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_i-l_i} \sum_{j_s=0}^{n-l_i-k+1} \sum_{j_{sa}=0}^{j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_{ik}=l_{ik}-D}^{j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_i=l_s+s-k+1}^{j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}-k-j_{sa}^{ik}+1} \sum_{n_i=n+l_k}^n \sum_{n_{is}=n-l_k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j_{sa}+1}^{l_k+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i}^{l_i-k+1} \sum_{j_{sa}^{ik}+2}^{l_{sa}^{ik}+2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}+j_{ik}-j^{sa}-k_2)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-k_2+1)}^{(n_{sa}=n-k_2+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+n}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-k_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}=n-k_2-j_{ik}+1)} \sum_{(n_s=n-j_i)}^{(n_{sa}=n-k_2-j_{ik}+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=,l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \binom{(\quad)}{j_{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_1} \sum_{(n_s=j_s-j_{i+1})}^{(n_{sa}+j_{sa}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_i-n_s-1)!}{(j_i-j_{i+1}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-j_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{(\quad)}{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{j_{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - l_i - k + 1)! \cdot (n - l_i - k + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - l_i - l_s)!}{(j_{ik} + l_{sa} - j^{sa} - l_i - l_s)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{s=0}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+2} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_s=j_{sa}^{ik}+1}^{i+j_{sa}-k-s+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{j_i} \sum_{l=0}^{j_s - k} \sum_{j_{ik}=j_s - l}^{j_s - l - k} \sum_{j_{sa}=l_i + n - l - k - D - s}^{j_s - l - k - s + 1} \sum_{n_{ik}=n+k-j_{ik}+1}^n \sum_{n_{sa}=n+k_2-j^{sa}+1}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa}=n+k_2-j^{sa}+1)}^{(n_{sa} + j^{sa} - j_i - k_2)} \sum_{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \binom{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}{j_{sa}=l_i+n+j_{sa}-D-s} \sum_{j_i=j^{sa}+l_i-j_{sa}}^{(n_i-j_s+1)}$$

$$\sum_{n_i=n+k}^n \binom{n_i-j_s+1}{n_{is}=n+k-j_s+1} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik_2})}^{(n_i-j_s+1)} \sum_{n_s=n_{sa}+j_{sa}^{ik_2}}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_{is} - j_i - l_{ik} - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_{is} - j_i - l_{ik} - k - j_{sa}^s)!} \cdot \frac{1}{(j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_{sa} + s - n - j_{sa} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} (l_{ik}+j_{sa}-k-j_{sa}^{ik}+1) \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{(n_{ik}+j_{ik}-j_{sa}-j_i)!}{(n_{sa}-n-j_i+1)!} \cdot \frac{(n_{sa}-j^{sa}-j_i)!}{(j_s-2)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!}$$

$$\frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!}$$

$$\frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_s} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{i_k}+s-n-l_i-j_{s_a}+1}^{D+l_{s_a}+s-n-l_i-j_{s_a}+1} \sum_{(j_s=j_{i_k}+l_s-l_{i_k})}^{( )}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_{i_k}-k+1} \sum_{(j^{s_a}=l_i+n+j_{s_a}-D-s)}^{(l_{s_a}-k+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} + j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_{sa} - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{(\quad)}{\quad} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{sa + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-j_i-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_i=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{l_i-k+1} \sum_{(j_i=j^{sa}+s-j_{sa}+1)}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s}^{(1)} \sum_{j_i=j^{sa}+j_{sa}+1}^{(1)} \sum_{j_{ik}=j_{sa}+1}^{l_{ik}-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n-k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j^{sa}+1}^{(k+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j^{sa}=l_{sa}+1}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+l_{ik}+1}^n \sum_{n_{is}=n_{ik}+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \frac{(n_{ik}+j_{ik}-k_2) \cdot n_{sa}^{sa-j_i}}{(n_{sa}=n-k_2+1) \cdot n_s=n-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_{sa} + l_{ik} - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

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$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$f_z^{z=1, \dots, s, D} j_i = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{()}{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s = j_{ik} + l_s - l_{ik}}^{D + l_{ik} - n - l_i - j_{sa}} \binom{D + l_{ik} - n - l_i - j_{sa}}{j_s} \cdot \\
 & \sum_{k = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - k} \sum_{(j^{sa} = l_s + j_{sa} - k + 1)}^{(l_i + j_{sa} - k - s + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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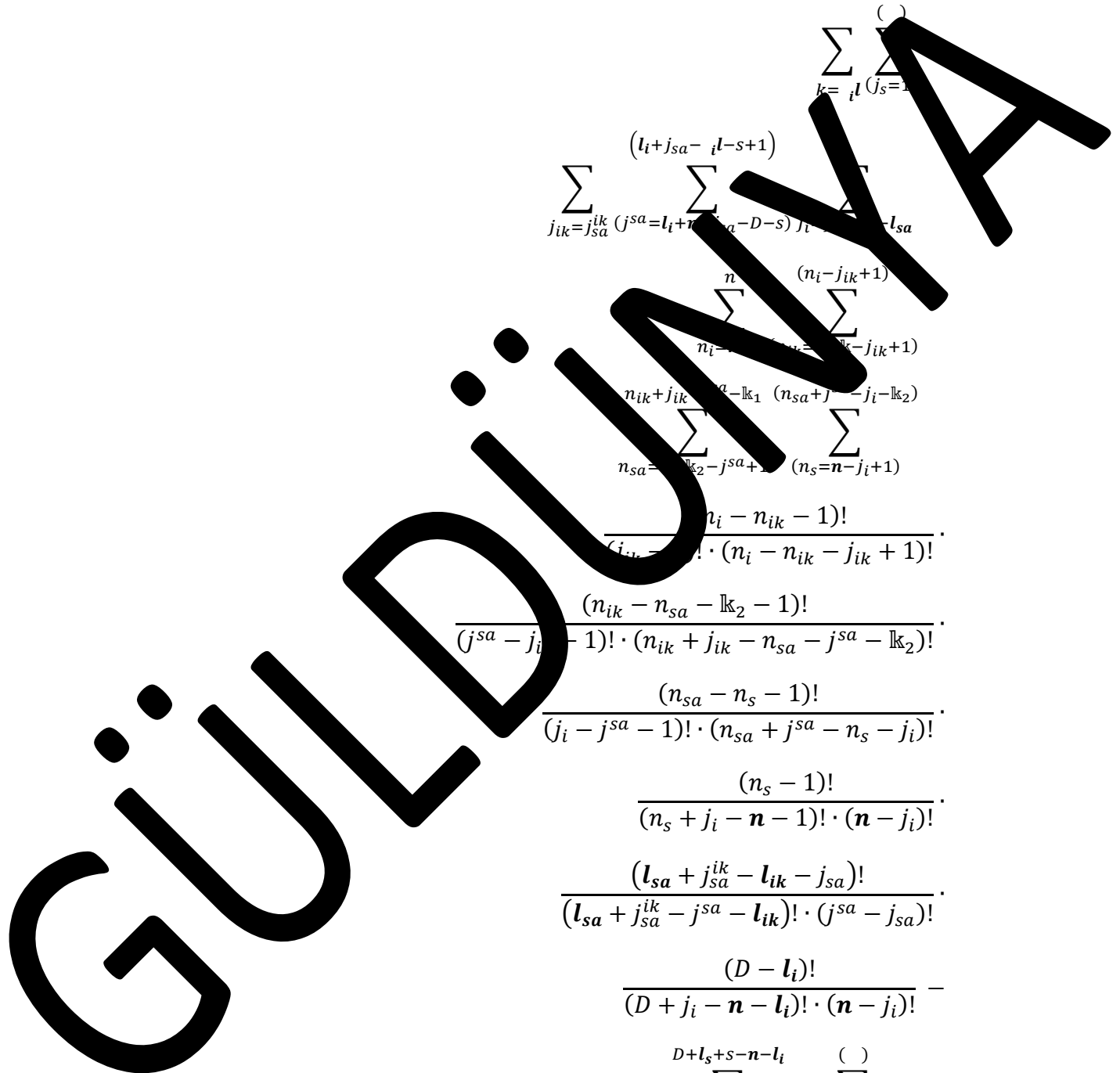
$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i^{l-1}} \sum_{j_s=j_{ik}+l_s-k}^{j_s=j_{ik}+l_s-k+1} \sum_{j_{ik}=j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j^{sa}=l_i+n-l_i-D-s}^{j^{sa}=l_i+n-l_i-D-s+1} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_i=j^{sa}+l_i-l_{sa}+1} \sum_{n_{is}=n_{is}-j_s+1}^{n_{is}=n_{is}-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{ik}=n+l_{k_2}-j_{ik}+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{\binom{D}{j_s=1}} \sum_{j_{ik}=j_{sa}^{ik}}^{(l_i + j_{sa} - i - s + 1)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n - j_{ik} + 1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(n_i - j_{ik} + 1)} \sum_{n_{sa}=k_2 - j_{sa} + 1}^{n_i - n_{ik} - 1} \sum_{(n_s=n-j_i+1)}^{(n_{sa} + j_{sa} - n_s - j_{ik} - k_2)} \frac{(n_i - n_{ik} - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+j_{sa}-j_{sa}}^{D+l_s+s-n-l_i} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_s + j_{sa} - k)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{\binom{D}{j_s=j_{ik}+l_s-l_{ik}}}$$





$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^{s}}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - 1)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{1, \dots, k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^i\}$$

$$j_{sa}^s > 4 \wedge j_{sa}^s + k \wedge$$

$$k_2: z - 2 \wedge k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{S_{DOSD}}(j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{(l_i+j_{sa}-k-s+1) \\ (j^{sa}=l_s+j_{sa}-k+1)}} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{j_s=2}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_{ik}=j_i}^{(l_i + j_{sa} - l_{sa} + 1)} \sum_{(j^{sa}=l_i + j_{sa} - D - s)} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{(j_s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=l_{ik}-l_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{sa}-k_1} \sum_{(n_{sa}=n_{ik}-j_{sa}+j_i)}^{(\cdot)} \sum_{j_{sa}=j_i} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot k_1 - n_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot k_1 - j_i - k - k - j_{sa})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i < D - n - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} = j_i - j_{sa} - s \wedge j_{sa}^{sa} = s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{ik}+j_{ik}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j_i-j_{sa}-j_i)}{(n_{sa}=n-l_{sa}+1) \cdot (n_s=n-j_i)} \cdot \frac{(n_{is}-l_{k_1}-1)!}{(j_s-2)! \cdot (n_{is}+1)!}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!}$$

$$\frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!}$$

$$\frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j^{s_a} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{i_k}+s-n-l_i-j_{s_a}+1}^{D+l_{s_a}+s-n-l_i-j_{s_a}+1} \sum_{(j_s=j_{i_k}+l_s-l_{i_k})}^{( )}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_s+j_{s_a}^{i_k}-k} \sum_{(l_{s_a}-k+1)}^{(j^{s_a}=l_i+n+j_{s_a}-D-s)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

GÜLDÜŞME

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_{sa} - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{(\quad)}{\quad} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{sa + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

A



$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_s-k)} \sum_{l_i-k+1}^{l_i-k+1} \\
 & \sum_{j_{ik}^{sa}+j_{sa}^{ik}+1}^{j_{ik}^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{j_i=j_{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s}^{n-l_i-k+1} \sum_{j_{ik}=j_{sa}^{l_s-k}}^{l_s+j_{sa}^{ik}-k} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{i_s}-j_s+1} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{D+l_{sa}+s-n-l_i-j_{sa}+1}{k} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}^k-k} \binom{l_i+n+j_{sa}-D-s-1}{j_{ik}-k+1} \sum_{i=n-D}^{j_{ik}-k+1} \binom{j_{sa}-l_{sa}+i}{i}$$

$$\sum_{n_i=n+l_{ik}}^n \binom{n_i-j_s+1}{n_i+l_{ik}-j_{ik}+1} \sum_{n_{is}=n_{ik}+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \binom{n_{is}+j_s-j_{ik}}{n_{is}+l_{k_2}-j_{ik}+1}$$

$$\binom{j_s-j_{ik}-j^{sa}-l_{k_2}}{j_s-j_{ik}} \sum_{n_{sa}=n-l_{k_2}+1}^{j_{sa}-j_i} \binom{j_{sa}-j_i}{n_{sa}-l_{k_2}+1} \binom{n_s-n-j_i+1}{n_{sa}-l_{k_2}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - j_{ik} - j^{sa} - l_{k_2})! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^k - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^k - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜŞÜMÜSÜ

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \frac{(n_{ik}+j_{ik}-j_s-1)! \binom{n_{sa}-j^{sa}-j_i}{n_{sa}-j^{sa}-j_i}}{(n_{sa}=n_{is}+1) \binom{n_s-n-j_i}{n_s-n-j_i}} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \binom{(\quad)}{j_s=j_{ik}+l_s-l_{ik}}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-2)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-i^{l+1})} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
& \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
& \sum_{j_{ik} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - k)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
& \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}
\end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i - j_i - 1)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_{j_s, j_{ik}, j^{sa}, j_i}^{SD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s+j_{sa}-k)} \right)$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}-n-l_i(l_s-k+1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_s+s}^{D+l_s+s} \sum_{j_s=n-l_i+1}^{j_s=n-l_i+1} \sum_{j_i=j_s-k+1}^{j_i=j_s-k+1} \sum_{j_{sa}=k-j_{sa}^{ik}+1}^{j_{sa}=k-j_{sa}^{ik}+1} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}}^{j_{ik}=j^{sa}+l_{ik}} \sum_{(j^{sa}=l_i+1, j_{sa}=D-s)}^{(j^{sa}=l_i+1, j_{sa}=D-s)} \sum_{j_i=j_s+s-j_{sa}}^{j_i=j_s+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n_{is}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(k+j_{ik}-j^{sa}-k_2)}^{(n_{sa}+j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+ \\
 & \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-k+1} \sum_{=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_s-1)}^{n_{is}+j_s-k-k_1} \\
 & \sum_{=n-j_{sa}^{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{=j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+s-j_{sa}}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s+1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j_i - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-k+1} \sum_{j_i=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDENKA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l=(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-l-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-l+1} \sum_{j_i=l_i+n-D}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \cdot \\
 & \sum_{j_{ik}=n+l_{ik}-l_{sa}}^{(l_s - j_{sa} - k)} \sum_{j_i=n+j_{sa}-D-s}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i - j_s + 1)} \cdot \\
 & \sum_{j_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i - j_s + 1)} \cdot \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{( )} \cdot \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$



$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j_{sa}+j_{sa}^{ik}-j_{sa}+j_{sa}-k} \sum_{j_{ik}=l_{ik}-D}^{j_{sa}=l_i-1} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{n-(j_i-j_s+1)} \sum_{i=n+\mathbb{k}}^n (n_{is}=n+\mathbb{k}-j_s+1) \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

GÜLDÜMÜNYA

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_i-l_s} \sum_{j_s=0}^{n-l_i-k+1} \sum_{j_{sa}=0}^{j_{sa}+j_{sa}^{ik}-j_{sa}-l_i-k+1} \sum_{j_{ik}=l_{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}-l_i-k+1} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_{sa}+j_{sa}^{ik}-j_{sa}-l_i-k+1} \\
& \sum_{i=n+k}^n \sum_{n_{is}=n-k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j_{sa}+1}^{i+k+j_{ik}-j_{sa}-k_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_{sa}^{ik}=l_{sa}}^{j_{sa}^{ik}-l_{sa}} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}=n-l_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{sa})} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{sa} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZYAZ

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j^{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDENREINER

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-i-s+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{sa}+j_{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{sa} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_i + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

GÜLDÜZYAN

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, l_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 4 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(j_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{D - l_i} \sum_{j_s = j_{ik} + l_s - l_{ik}}^{D - l_i} \\
 & \sum_{j_i = j^{sa} + l_i - l_{sa}}^{D - l_i} \sum_{j_s = l_i + n + j_{sa} - D - s}^{D - l_i} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{D - l_i} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{(j_s)} \binom{(\cdot)}{j_s - k}$$

$$\sum_{j_{ik}=j_s}^{(j_s - s + 1)} \binom{(\cdot)}{j_s - j_{ik} - s + 1} \binom{(\cdot)}{j_s - j_{ik} - s + 1} \binom{(\cdot)}{j_s - j_{ik} - s + 1}$$

$$\sum_{n_{ik}=n+k}^n \binom{(n_i - j_{ik} + 1)}{(n_{ik} = n + k - j_{ik} + 1)}$$

$$\sum_{n_{sa}=n+k_2 - j^{sa} + 1}^{(n_{sa} + j^{sa} - j_i - k_2)}$$

$$\sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜMNA

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j_{sa}+l_i-l_{ik}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_s}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_2 - j_s - j_i - k_1 - k_2)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2 - j_s^s)!}$$

$$\frac{1}{(n_{sa} + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s < D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq n \wedge$

$l_{ik} - j_{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n - l_i \leq D + j_i + s - n - j_{sa} \wedge$

$D > n \wedge I = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_Z^{\mathcal{S} \Rightarrow j_s, j_{ik}, j^{sa}, j_i} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}} \binom{\quad}{\quad} \binom{\quad}{\quad}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \binom{\quad}{\quad} \binom{\quad}{\quad} \binom{\quad}{\quad}$$

$$\frac{(n_{ik}+j_{ik}-j_{sa}^{ik})! \cdot (n_{sa}-j^{sa}-j_i)!}{(n_{sa}=n-l_k+1) \cdot (n_s=n-j_i)!} \cdot \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}} \binom{\quad}{\quad} \binom{\quad}{\quad}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!}$$

$$\frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!}$$

$$\frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j^{s_a} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{i_k}+s-n-l_i-j_{s_a}+1}^{D+l_{s_a}+s-n-l_i-j_{s_a}+1} \sum_{(j_s=j_{i_k}+l_s-l_{i_k})}^{( )}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_{i_k}-k+1} \sum_{(j^{s_a}=l_i+n+j_{s_a}-D-s)}^{(l_{s_a}-k+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j^{sa} - l_i - j_{sa}^{ik} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{(\quad)}{\quad} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j^{sa} - l_i - j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = l_{sa} + n - D)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = l_i + n - D}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_s = n - j_i + 1)}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{sa}^{ik}+1}^{l_i+n+D-s-1} (l_{sa}+1) \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{(j_s=j_{ik}+l_s-k)}^{l_i-k+1} \sum_{(j^{sa}=j_{ik}-j_{sa}-j_{sa}^{ik})}^{l_i-k+1} \sum_{(j_i=j^{sa}-j_{sa}+1)}^{l_i-k+1} \\
 & \sum_{(n_{is}=n+l_k)}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{l_k+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDÜZYAN

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j^{sa}=l_{sa}+1}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+l_{ik}+1}^n \sum_{n_i=j_i+1}^{(n_i-j_s)} \sum_{n_{is}=n_{ik}+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜSÜZYA



$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \frac{(n_{ik}+j_{ik}-k_2) \cdot (n_{sa}+j_{sa}-j_i)}{(n_{sa}=n-k_2+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_s=j_{ik}+l_s-l_{ik})}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{is}-n_{is}+j_{ik}-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_{ik} - k + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{lk})}^{( )} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

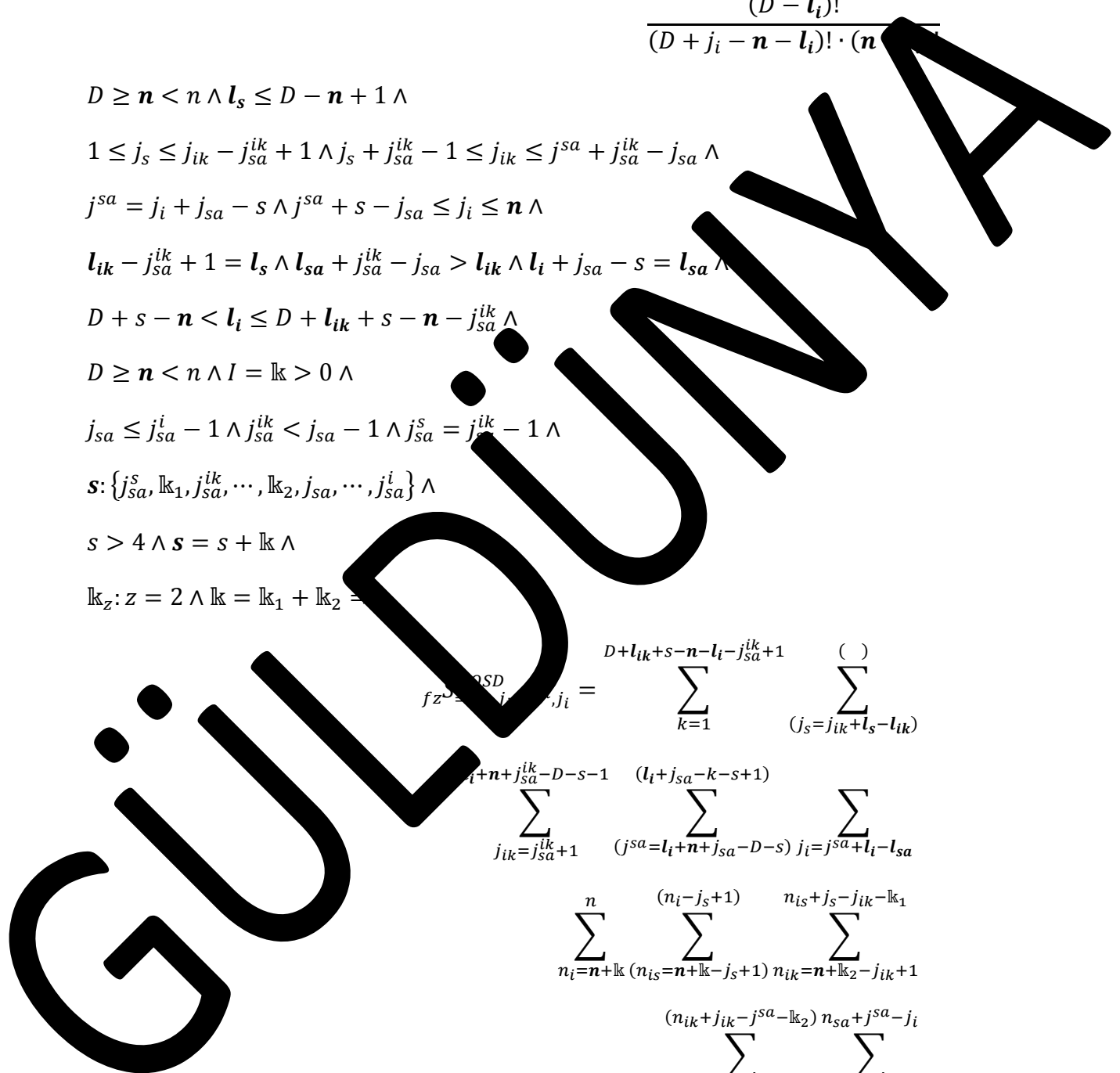
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fz = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{i+n+j_{sa}^{ik}-D-s-1} \sum_{(l_i+j_{sa}-k-s+1)}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(j_i=j_{sa}^{ik}+l_i-l_{sa})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}{\sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1}} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s = j_{ik} + l_s - l_{ik}}^{D + l_{ik} - n - l_i - j_{sa}} \binom{D - l_i}{j_s} \cdot \\
 & \sum_{j_{ik} = l_i + j_{sa} - k}^{l_i + j_{sa} - k - s + 1} \binom{l_i + j_{sa} - k - s + 1}{j_{ik}} \cdot \sum_{j_i = j^{sa} + l_i - l_{sa}}^{j^{sa} - D - s} \binom{j^{sa} - D - s}{j_i} \cdot \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i^{l-1}} \sum_{j_s=j_{ik}+l_s-1}^{j_s=j_{ik}+l_s-1} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_i=j^{sa}+l_i-l_{sa}} \sum_{j_{ik}=j_{sa}^{ik}}^{j_{ik}=j_{sa}^{ik}-k} \sum_{j_{sa}=l_i+n_{is}-D-s}^{j_{sa}=l_i+n_{is}-D-s} \sum_{n_{is}=n_{is}-j_s+1}^{n_{is}=n_{is}-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{ik}=n+l_{k_2}-j_{ik}+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )} \sum_{j_{ik}=j_{sa}^{ik}}^{(l_i + j_{sa} - i^{l-s+1})} \sum_{(j_{sa}=l_i+n+j_{sa}^{ik}-D-s)}^{( )} \sum_{j_i=l_{sa}}^{( )}$$

$$\sum_{n_i=j_{ik}+1}^{(n_i - j_{ik} + 1)} \sum_{n_{ik}=j_{ik}+1}^{(n_i - j_{ik} + 1)} \sum_{n_{sa}=k_2 - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - k_2)} \sum_{(n_s = n - j_i + 1)}^{( )}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{( )}$$

GÜLDÜMÜŞA

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - s + 1)! \cdot (j_s - s)!}{(l_s - j_s - s + 1)! \cdot (j_s - s)!}$$

$$\frac{(D - n)!}{(D - n)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)!} \cdot (n - j_i)!$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - 1 \wedge$

$D \geq n < n \wedge l = k - 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{1, \dots, k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^i\}$

$> 4 \wedge j_{sa}^i = s + k \wedge$

$k_2: z \geq 2 \wedge k_2 \geq k_1 \Rightarrow$

$$f_{z \Rightarrow j_s}^{DOSD} (j_{ik}, j_{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

$$\sum_{j_{i_k}=l_s+j_{s_a}^{i_k}-k-s+1}^{l_i+j_{s_a}^{i_k}-k-s+1} \sum_{(j^{s_a}=j_{i_k}+l_{s_a}-l_{i_k})}^{( )} \sum_{j_i=j^{s_a}+l_i-l_{s_a}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_s=1}^{(l_i-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{j_{ik}=n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s} \sum_{j_s=1}^{(l_i-1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} j_i^{j_{sa}+l_i-l_{sa}} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s-1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_s-1 \sum_{(n_{sa}=n_{ik}-j_{sa}^{ik}-1)}^{()} \sum_{j_{sa}=j_i}^{()} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot \mathbb{k}_1 - j_i - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s = D - n - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + \dots - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$\geq n - \dots \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_{ik}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is})!}{(n_i - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{is} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

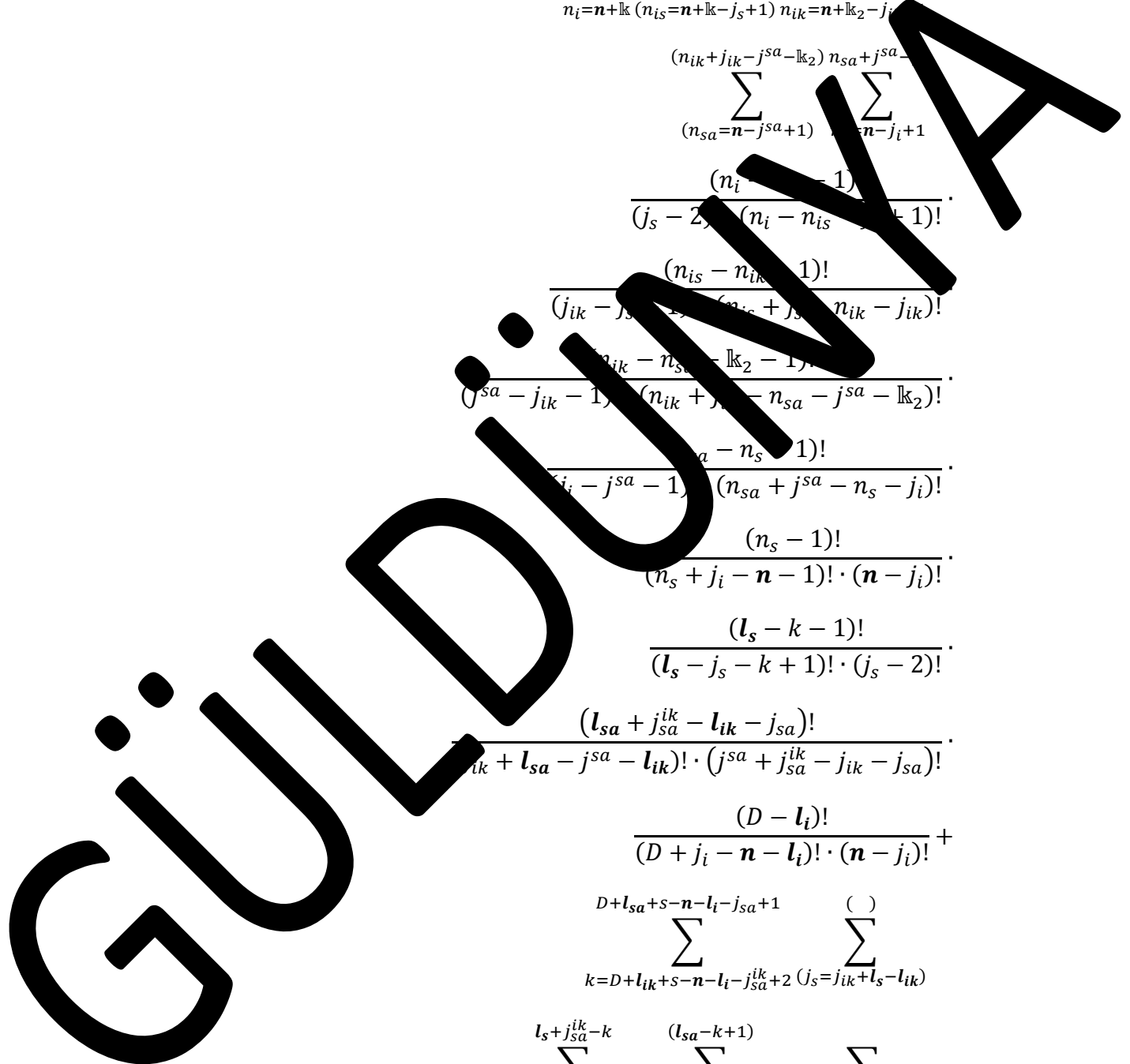
$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

GÜLDÜZMİNİA

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - k} \sum_{(l_{sa} - k + 1)}^{(l_{sa} - k + 1)} \sum_{j_i = j_{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n - j_i + 1)}^{n_{sa} + j_{sa} - j_{ik} - k_2} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! (n_i - n_{is} - 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(n_i - j_{sa} - 1)! (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k = D + l_{ik} + s - n - l_i - j_{sa} + 1}^{D + l_{sa} + s - n - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\begin{aligned}
 & \sum_{j_{ik} = j_{sa}^{lk} + 1}^{l_s + j_{sa}^{lk} - k} \sum_{(l_{sa} - k + 1)}^{(l_{sa} - k + 1)} \sum_{j_i = j_{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1}
 \end{aligned}$$



$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_s-\mathbb{k}_2)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_s-\mathbb{k}_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-\mathbb{k}+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-\mathbf{n}-l_i)! \cdot (\mathbf{n}-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_{ik}+s-\mathbf{n}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\quad)} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+\mathbf{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+\mathbf{n}-D)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+\mathbf{n}-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \left. \frac{\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(n_i-n_{is}-1)!} \right) \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - \dots - k + 1)! \cdot (l_s - \dots - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \dots)!}{(j_{ik} + l_{sa} - j^{sa} - \dots) \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_s - l_{sa} - \dots)!}{(j^{sa} + l_i - \dots - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+\dots-l_i-j_{sa}^{ik}+1} \binom{(\dots)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_s^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=l_i}^{l_s+j_{sa}-k} \sum_{(l_{sa}=j_{sa}+1)} \sum_{l_i-k+1} \\
 & \sum_{j_{ik}=l_i}^{j_{sa}-D-j_{sa}^{ik}+1} \sum_{(l_{sa}=j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{D+l_{sa}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s}^{j_s=j_{ik}+l_s} \sum_{j_{ik}=l_{ik}+1}^{l_s+j_{sa}+j_{ik}-j_{sa}-D-s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{i_s=n+l_k}^n \sum_{i_s=n+l_k-j_s+1}^{n_i-j_s+1} \sum_{i_k=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{l_k+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDENMÄSSIG

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}^k-k} \sum_{j_{sa}=l_i+n+j_{sa}-D-s}^{(l_{sa}-k+1)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}-j_{ik}+1}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^k - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^k - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜŞÜMÜSÜ

$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_i-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-l_i+1)}^{(n_{ik}+j_{ik}-j_s)} \sum_{(n_{sa}=l_{sa}-j_i)}^{(n_{sa}=l_{sa}-j_i)} \\
 & \frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \\
 & \frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}$$

GÜLDENWA

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$$\sum_{j_{ik}=j_{sa}^{lk}} \binom{l_{sa}-i^{l+1}}{j_{sa}=l_{sa}+n-D} \binom{l_i-i^{l+1}}{j_i=l_i+n-D}$$

$$\sum_{n_i=n+lk}^n \binom{(n_i-j_{ik}+1)}{(n_{ik}=n+lk-j_{ik})}$$

$$\sum_{n_{sa}=n+lk_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-lk_1} \binom{(n_{sa}+j^{sa}-j_i-lk_2)}{(n_s=j_i+1)}$$

$$\frac{(n_i-n_{lk}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-1)!}$$

$$\frac{(n_{ik}-n_{sa}-lk_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-lk_2)!}$$

$$\frac{(n_s-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_i+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(n_i+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{lk}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_i+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-k} \binom{(\quad)}{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+lk}^n \binom{(n_i-j_s+1)}{(n_{is}=n+lk-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s - k_1, j_{sa}^{ik}, \dots, l_{sa} - j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - k \wedge$$

$$k_z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - \dots - k + 1)! \cdot (n - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - \dots)! \cdot (j_{ik} - \dots - j^{sa} + 1)!} \cdot \\
 & \frac{(D - \dots)}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{l_{sa}+s-n} \sum_{j_s=2}^{l_s-k+1} \sum_{j_{ik}=l_i+1}^{j_{sa}-D-s} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZÜMÜ



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{j_s=2}^{D+l_s+j_{sa}^{ik}+1} \sum_{j_{ik}=l_{ik}+1}^{j_{ik}+l_{sa}^{ik}+1} \right) \\
 & \sum_{j_{ik}=l_{ik}+1}^{l_i+n+j_{sa}^{ik}-D} \sum_{j_{sa}^{ik}=l_{sa}^{ik}+1}^{l_i-k+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{sa}+j_{sa}^{ik}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa}^{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa}^{ik} - 1)! \cdot (n_{sa} + j_{sa}^{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=2}^{D+l_s+s-n-l_{ik}-j_{sa}^{ik}+1} \sum_{k=2}^{l_i}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{ik}+l_{sa}-l_{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{ik}+l_{sa}-l_{ik}}^{l_i} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{ik}+l_{sa}-l_{ik}}^{l_i} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-j_{ik}+l_{sa}-l_{ik}}^{l_i}$$

$$\sum_{n_i=n+l_{ik}-j_{ik}+1}^n \sum_{n_i=n+l_{ik}-j_{ik}+1}^n \sum_{n_i=n+l_{ik}-j_{ik}+1}^n \sum_{n_i=n+l_{ik}-j_{ik}+1}^n$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{ik}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_i-k+1}^{n_{is}+j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_i-1)}^{(n_{ik}+j_{ik}-l_{sa}-k_2)} \sum_{(n_{is}=n_i-1)}^{(n_{sa}+j^{sa})} \\
 & \frac{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=j_{ik}+l_{sa}-l_{ik})}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \binom{(\quad)}{\quad} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_{sa}+j_{sa})}^{(n_{sa}+j_{sa}-n-j_i+1)} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s) \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j_{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1) \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \binom{(\quad)}{\quad} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k1} \\ n_{ik}=n+l_{k2}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j_i - n - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(j_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - j^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (l_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (l_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{s + j_{sa}^{ik} - k} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{()} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!}
 \end{aligned}$$

GÜLDÜZÜMKA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z, j_s, j_{ik}, j_{sa}, j_i}^{DOSD} &= \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \\ &\sum_{j_{ik}=l_{ik}+n-D}^{n+j_{ik}-D-s-1} \sum_{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$



$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s + 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i - j_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s - j_s - k} \sum_{j_s=2}^{l_s + s - n - l_i - k} \sum_{j_{ik}=l_{ik} - j_s - k}^{l_s - k} \sum_{j_{sa}=j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_i + j_s - k - s + 1)} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{n - j_s + 1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+l_k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i - l_s - k + 1)! \cdot (n - j_i - l_s - k + 1)!} + \\
 & \sum_{j_s=2}^{l_s - k + 1} \sum_{j_{ik}=j^{sa} + l_i - l_{sa}}^{l_{ik} - k + 1} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{(l_i + j_{sa} - j_s + 1)} \\
 & \sum_{n_i=n+k}^{(n_s + 1)} \sum_{n_{is}=n+k-j_s+1}^{(n_s + 1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GUIDANCE

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=D+l_s}^{i-1} \sum_{s=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{n+j_{sa}-D}^{(l_i+j_{sa}-j_{ik}+1)}$$

$$\sum_{n_i=n+l_{ik}-j_{ik}+1}^n \sum_{n+l_{ik}-j_{ik}+1}^{n+l_{ik}-j_{ik}+1} \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{j_{ik}-k_1}$$

$$\sum_{j_{sa}=n-j_{sa}+1}^{j_{ik}-j^{sa}-k_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜZYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \sum_{j_s=1}^{( )} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{j^{sa}=l_i+n}^{(l_i+j_{sa}-i^{l-s+1})} \sum_{j_{sa}=n-D-s}^{(n-j_{ik}+1)}$$

$$\sum_{n_{ik}=n_{sa}-l_{k_1}}^{n_{ik}+j_{ik}-n_{sa}-l_{k_1}} \sum_{n_{sa}=n_{k_2}-j^{sa}+1}^{(n_{sa}+j_{ik}-l_{k_2})} \sum_{n_s=n-j_i+1}^{(n_i-j_{ik}+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

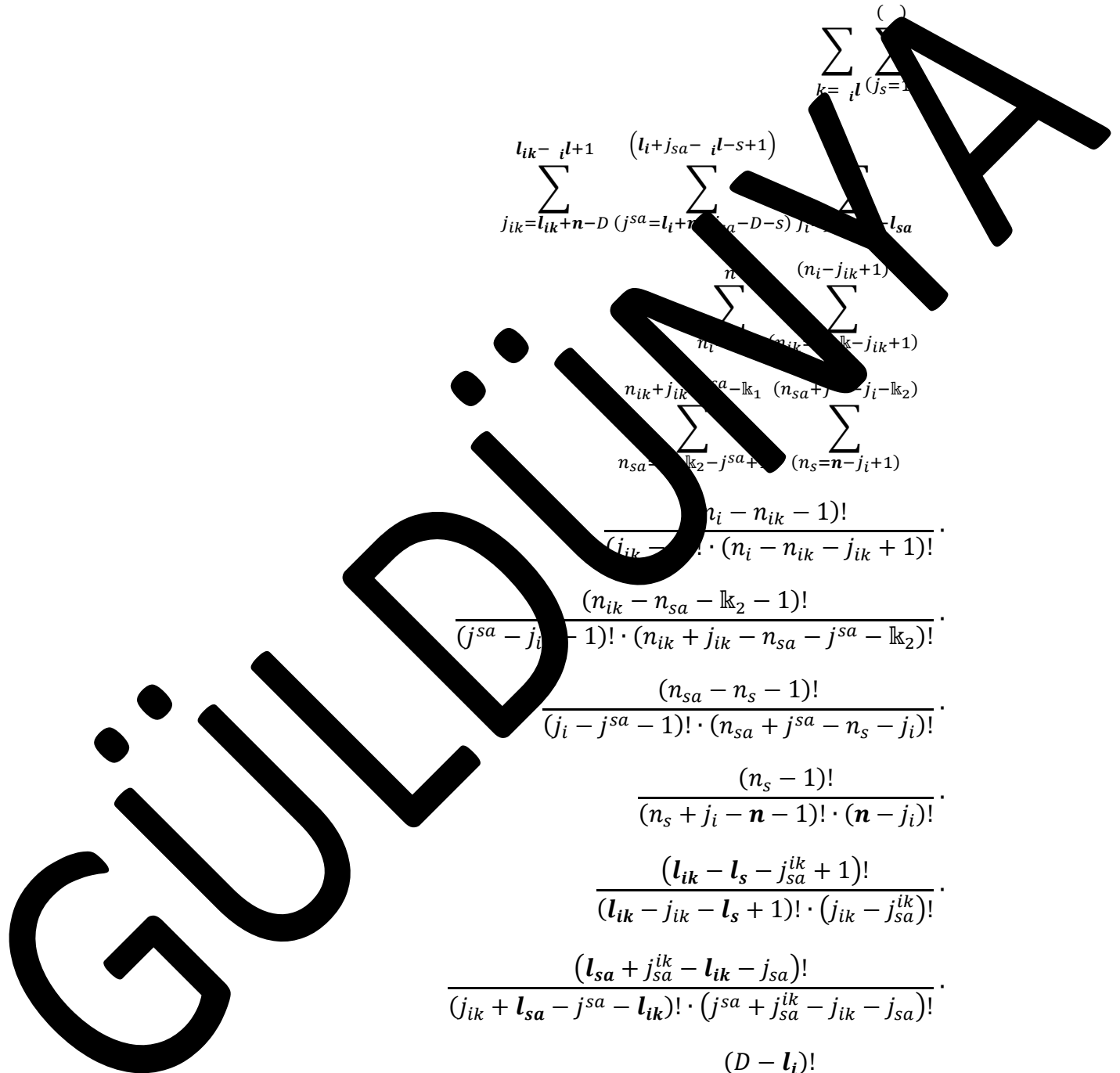
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$





$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_s - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(j_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-\mathbf{n}-l_i-j_{sa}^{ik}+2}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+\mathbf{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - \dots - k + 1)! \cdot (n - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \dots)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - \dots)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=j_{sa}^{ik}} \sum_{(l_i + j_{sa} - i l - s + 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + l_i - l_{sa}} \binom{(\quad)}{j_s = 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_i+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{(j_{sa}^{ik}=j_{sa}-l_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i+l_{ik}-l_s)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n_i-j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_i-j_{ik}-j_{sa}^{ik})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s) \cdot (j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s) \cdot (j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - l_{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^{ik} = j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa} = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=n^2+s-j_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_{is}+j_s-\mathbb{k}-\mathbb{k}_1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_s-1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(n_{sa}+j^{sa}-j_i)} \sum_{(j^{sa}+1)}^{(j^{sa}+1)} \sum_{(j_i+1)}^{(j_i+1)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} (l_{sa}-k+1) \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}+j^{sa}-n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}+1)!}{(j_{ik}-j_s+1)!(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s+1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(l_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} (l_{sa}-k+1) \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_s)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_s-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right. \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_i+j_{sa}-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \left. \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(n_i-n_{is}-1)!} \right) \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - n - k + 1)! \cdot (n - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_i-s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-k+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i_s=1}^{l_{ik}+s-n_{is}-j_{sa}^{ik}+1} \sum_{i_s=l_i+n-D-s+1}^{l_{ik}+2} \\
 & \sum_{j_i=l_{is}+l_{ik}-j_{sa}^{ik}+1}^{l_{sa}+1} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{D+l_{sa}+s-n-l_i-j_{sa}} \sum_{j_s=2}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_i=j_s}^{(n-l_s-j^{sa}-n-D)} \sum_{j_i=l_i+n-D}^{(n-j_s-1)} \sum_{n_{is}=n+k}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i+1} \sum_{j_i=k-j_{sa}+2}^{l_i-k-j_{sa}+2} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{is}+j_{ik}-j^{sa}-1)}^{(n_{is}+j_{ik}-j^{sa}-1)} \sum_{(n_{sa}-n_i+1)}^{(n_{sa}-n_i+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-k_2-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_s - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}} \binom{l_{sa}-l_{i+1}}{j_{sa}=l_{sa}+n-D} \binom{l_i-l_{i+1}}{j_i=l_i+n-D}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_{ik}+1}{n_{ik}=n+l_k-j_{ik}}$$

$$\sum_{n_{sa}=n+l_{k_2}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \binom{n_{sa}+j_{sa}-j_i-l_{k_2}}{n_s=j_i+1}$$

$$\frac{\binom{n_i-n_{ik}+1}{j_{ik}-2}!}{(n_i-n_{ik}-j_{ik}+1)!}$$

$$\frac{\binom{n_{ik}-n_{sa}-l_{k_2}+1}{j_{sa}-j_{ik}-1}!}{(n_{ik}-n_{sa}-j_{sa}-l_{k_2})!}$$

$$\frac{\binom{n_{ik}-n_s-1}{j_i-j_{sa}-1}!}{(j_i-j_{sa}-1)! \cdot (n_{ik}+j_{sa}-n_s-j_i)!}$$

$$\frac{\binom{n_s-1}{n_s-j_i-n-1}!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{\binom{l_i+j_{sa}-l_{ik}-j_{sa}}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!}}$$

$$\frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_i+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_{ik}-k-j_{sa}^{ik}+2}{j_s=l_i+n-D-s+1}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \binom{()}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{n_{is}=n+l_k-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \leq 4 \wedge s = s - k \wedge$$

$$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_i)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_i-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D}^{i-1} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_{ik}-l_s}^{(i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2) \cdot n_{sa} + j^{sa} - j_i}{(n_{sa} = n - j^{sa} + 1) \cdot (n_s = n - j_i + 1)} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{j_i} \sum_{l=0}^{j_s - k} \sum_{j_{ik}=j_s - l}^{j_s - l - k} \sum_{j_{sa}=l_i + n - l - k - j_{ik} - j_{sa} - 1}^{j_s - l - k - j_{ik} - j_{sa} - 1} \sum_{n_{ik}=n+k-j_{ik}+1}^{n} \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_i - j_{ik} + 1} \sum_{n_s=n-j_i+1}^{(n_i - j_{ik} + 1)} (n_{ik} - n_{sa} - k_2 - 1)! \cdot (n_{sa} + j^{sa} - j_i - k_2) \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j_s} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_s - j_i - l_{k_1} - l_{k_2})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_s - j_i - l_{k_1} - l_{k_2})!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \wedge D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} + j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{ik} + 1 > l_s \wedge l_s + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_i + s - n - 1 \wedge$$

$$D > n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s > 4 \wedge \{j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + l_{k_1} \wedge$$

$$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2}$$

$$\sum_{(n_{sa}=n_{is}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{i_k}=l_i+n+j_{s_a}^{i_k}-D-s}^{l_i+j_{s_a}^{i_k}-k-s+1} \sum_{(j^{s_a}=j_{i_k}+l_{s_a}-l_{i_k})} \sum_{j_i=j^{s_a}+l_i-l_{s_a}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{ik}^{i_l}-s+1} \sum_{( )}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_s-k+1}{j_s=l_i+n-k-s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}} \binom{l_s-k+1}{j_{sa}=j_{ik}+l_{sa}} \binom{l_s-k+1}{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}} \binom{l_s-k+1}{j_s+1} \sum_{n_i=n+l_{ik}-j_s} \binom{l_s-k+1}{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_{k2})} \binom{l_s-k+1}{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_s - j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k1} > 0 \wedge$$

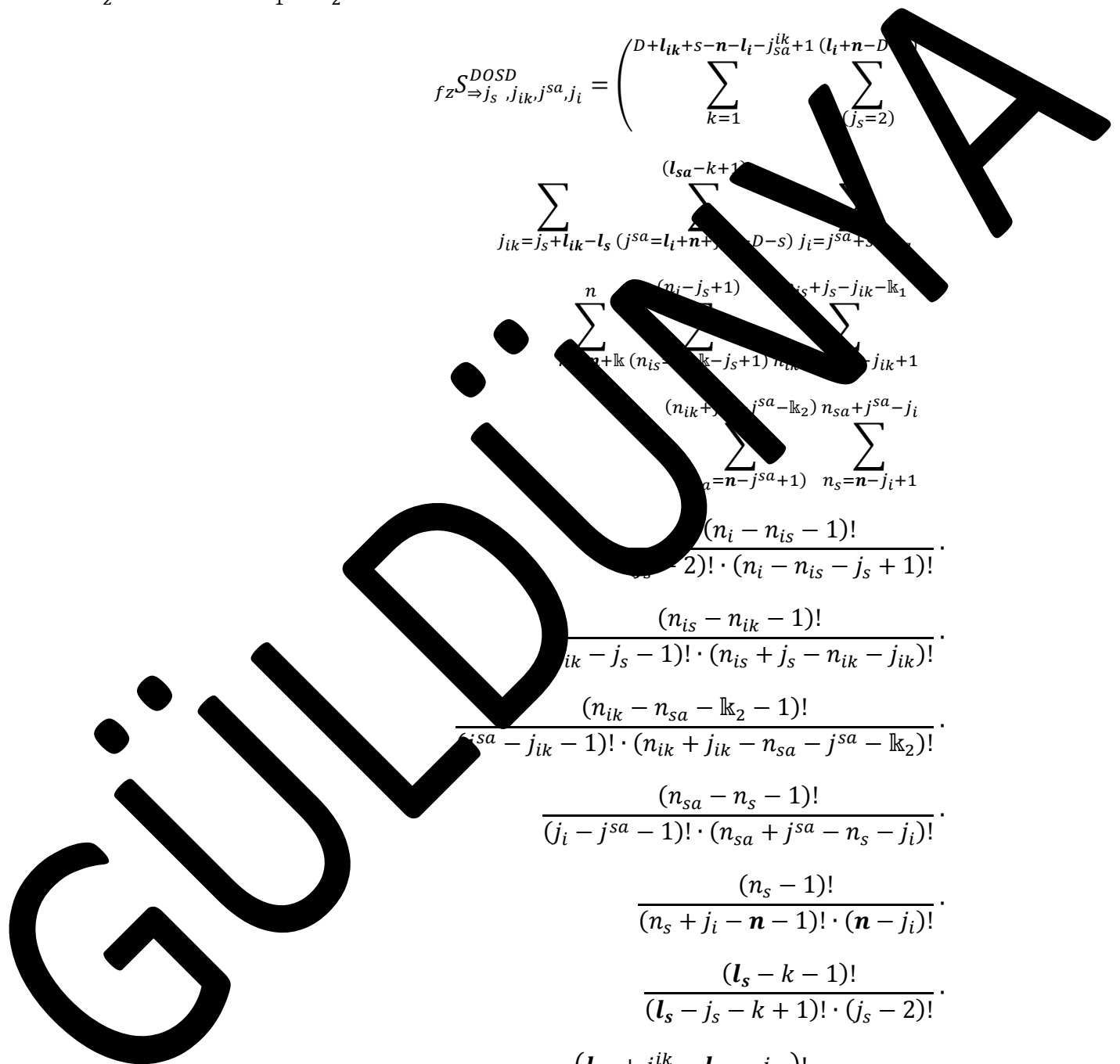
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{j_s=2}^{l_i+n-D} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{l_{sa}-k+1} \sum_{j_{sa}=l_i+n+j_{ik}-D-s}^{j_{sa}-j_{ik}-\mathbb{k}_1} \sum_{j_i=j_{sa}+j_{ik}-\mathbb{k}_2}^n \sum_{n_{is}=n_{ik}-j_s+1}^{n_{is}-\mathbb{k}-j_s+1} \sum_{n_{ik}=j_{ik}+1}^{n_{ik}+j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \right) \cdot \frac{(n_i-n_{is}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
 & \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{(n_{ik}+j_{ik}-l_k)} \sum_{(n_s=n-j_i)}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - n - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})^{j^{s_a} - l_{i_k}} \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_{i_k}+s-n-l_i-j_{s_a}^{i_k}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right) \\
 & \sum_{j_{i_k}=j_s+l_{i_k}-l_s}^{(j_i+j_{s_a}-s-1)} \sum_{(j^{s_a}=l_{s_a}+n-D)}^{l_{s_a}+s-k-j_{s_a}+1} \sum_{j_i=l_i+n-D}^{j_i} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2 - 1)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-k+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i - j_{sa} - s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{(j_{ik}=j_{ik}-l_s)}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{(j_i=j^{sa}+s-j_{sa}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{k=0}^{D+l_{sa}+s-n-j_{sa}+1} \sum_{j_s=2}^{l_s-k+l_{sa}+1} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{n-l_{ik}+s-n-j_{ik}} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-k_2) n_{sa}+j^{sa}-j_i}{\sum_{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜZYAZ

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}-k)} \sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}+n-D)} \sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}+s-k-j_{sa}+2)}$$

$$\sum_{n_i=n+l_{ik}-j_{sa}+1}^n \sum_{n_{is}=n+l_{ik}-j_{sa}+1}^{n-l_{sa}+j_{sa}-j_{ik}-k_1} \sum_{n_{ik}=n+l_{ik_2}-j_{ik}+1}^{n-l_{sa}+j_{sa}-j_{ik}-k_2}$$

$$\sum_{a=n-j^{sa}+1}^{n-l_{sa}+j_{sa}-j_{ik}-k_2} \sum_{n_s=n-j_i+1}^{n-l_{sa}+j_{sa}-j_{ik}-k_2} n_{sa} + j^{sa} - j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(=l_i+n-D)}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+l_{is}+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{ik}+1)}^{n_{is}+j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+l_{sa}+1)}^{(n_{ik}+j_{ik}-l_{sa}-k_2)} \sum_{(=n-j_i+1)}^{n_{sa}+j^{sa}-k_2} \\
 & \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{ik}-1)!}{(j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{k=1}^{( )} \sum_{j_s=1}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{(l_{sa}-i^{l+1})} \sum_{(j_{sa}=l_{sa}+n-D)}^{l_i-i^{l+1}} \sum_{j_i=l_i+n} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n-i^{l+1}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}}^{n_{ik}+j_{ik}-j_{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(j_{sa}-k_2)} \\
 & \frac{(n_{ik}-1)!}{(j_{ik}-1)! \cdot (n_i-j_{ik}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-1)! \cdot (n_i+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_i-n_s-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot (k - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - 1)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - j_{sa} \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{1, \dots, k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^i\}$$

$$s > 4 \wedge s \leq s + k \wedge$$

$$k_2: z \geq 2 \wedge k_2 \leq k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - n - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1}^{l_{i_k}-k+1} \sum_{(j^{s_a}=j_{i_k}+l_{s_a}-l_{i_k})} \sum_{j_i=j^{s_a}+s-j_{s_a}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_s+s-n-l_i-j_s+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{\binom{D + j_i - n - l_i}{D + j_i - n - l_i}}{\binom{D + j_i - n - l_i}{D + j_i - n - l_i}} + \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{k=2}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_i=j_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \binom{l_{ik}+s-k-j_{sa}^{ik}+1}{j_i+l_{ik}+n-D} \binom{n_{is}+j_s-j_{ik}-k_1}{n_{is}=n+k-j_s+1} \binom{n_{ik}+j_{ik}-j^{sa}-k_2}{n_{ik}=n+k_2-j_{ik}+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_s} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \prod_{k=2}^{D+l_s+s} \frac{(l_k + n - j_{sa}^{ik})!}{(j_s = 2)!} \\
 & \sum_{j_{ik}=l_{ik}+n-l_{sa}^{ik}}^{l_{ik}-k+1} \sum_{j_{sa}=j_{ik}+n-l_{ik}}^{l_{ik}-k+1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{ik}-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n-l_k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{l_k+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{(l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
 & \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{(n_{ik}+j_{ik}-l_k)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \binom{(\quad)}{\sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-n_{is}+n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \binom{(\quad)}{\sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j_i - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDÜŞMAYA

$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_{sa}-s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

GÜLDENYA

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa} - j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{j_i=1}^{n+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_i=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{D-s} \sum_{j_{ik}=1}^{l_i+n+j_{sa}-s-1} \sum_{(l_i+j_{sa}-k-s+1)} \sum_{(j_i=n-D)} \sum_{(l_i+n+j_{sa}-D-s)} j_i = j^{sa} + l_i - l_{sa} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=2}^{D+l_s+1} \sum_{j_i=0}^{(l_i+D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{j_{sa}=j_{sa}-j_{sa}^{ik}}^{k-s+1} \sum_{j_i=0}^{n-l_i-l_{sa}} \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{n_{is}=n_{is}-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{l_{ik}+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=l_{sa}-l_{sa})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_2}} \\
 & \sum_{(n_{sa}=n-l_{k_2}+1)}^{(n_{ik}+j_{ik}-l_{k_2})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{k_2} - 1)!}{(j_s - 2)! \cdot (n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{s_2} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i-n_{sa}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{sa}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_i-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(n_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa}-1)! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}^{( )} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{lk}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

GÜLDENKA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_i - k + 1)! \cdot (l_s - j_i - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{D + l_{ik} + s - l_i - j_{sa}^{ik} + 1} \sum_{j_s = j_{ik} + l_s - l_{ik}}^{( )} \\
 & \sum_{j_i = j_{sa}^{ik} + 1}^{s - k + 1} \sum_{(j^{sa} = j_i + l_{sa} - l_i) \quad j_i = l_{sa} + n + s - D - j_{sa}}^{( )} \sum_{l_{sa} + s - k - j_{sa} + 1}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_s = n - j_i + 1)}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{(n_s)} \sum_{l=j_s}^{(n_s)} \sum_{j_{ik}=j_s}^{(n_s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(n_s)} \sum_{j_{ik}=j_s}^{(n_s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(n_s)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{sa}=n+k_2-j^{sa}+1} \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{sa}+j^{sa}-j_i-k_2)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜMBA



$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{()}{j^{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \binom{()}{n_{ik}=n_{is}-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})} \binom{()}{n_s=n_{sa}+j_s^{sa}} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_i - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_i - k - k - j_{sa}^s)!} \\
 & \frac{1}{(j_s + j_{sa}^s - j_s - s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa}^{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} &= \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D}^{l_s+s-k} \\
 &\sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n-l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_2}} \\
 &\frac{\binom{(n_{ik}+j_{ik}-j_s)}{(n_{sa}=n-l_{k_2}+1)} \binom{(n_{sa}-j^{sa}-j_i)}{(n_s=n-j_i)}}{\binom{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{sa}-j^{sa}-j_i)!}} \\
 &\frac{\binom{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}}{\binom{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j^{sa}-j_i-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}} \\
 &\frac{\binom{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}}{\binom{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}} \\
 &\frac{\binom{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}}{\binom{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(\quad)}{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{lk}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l_i-j_{sa}+1} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{(j_s=j_i+l_s-l_{ik})} \binom{D+l_s+s-n-l_i}{k} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{D+l_s+s-n-l_i}{k} \sum_{(j_s=j_i+l_s-l_{ik})} \binom{D+l_s+s-n-l_i}{k} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k_2})} \binom{D+l_s+s-n-l_i}{k} \sum_{(n_s=n_{sa}+j_{sa}-j_i)} \binom{D+l_s+s-n-l_i}{k} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_{k_1} - l_{k_2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_i - n - l_{k_1} - l_{k_2} - j_{sa})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

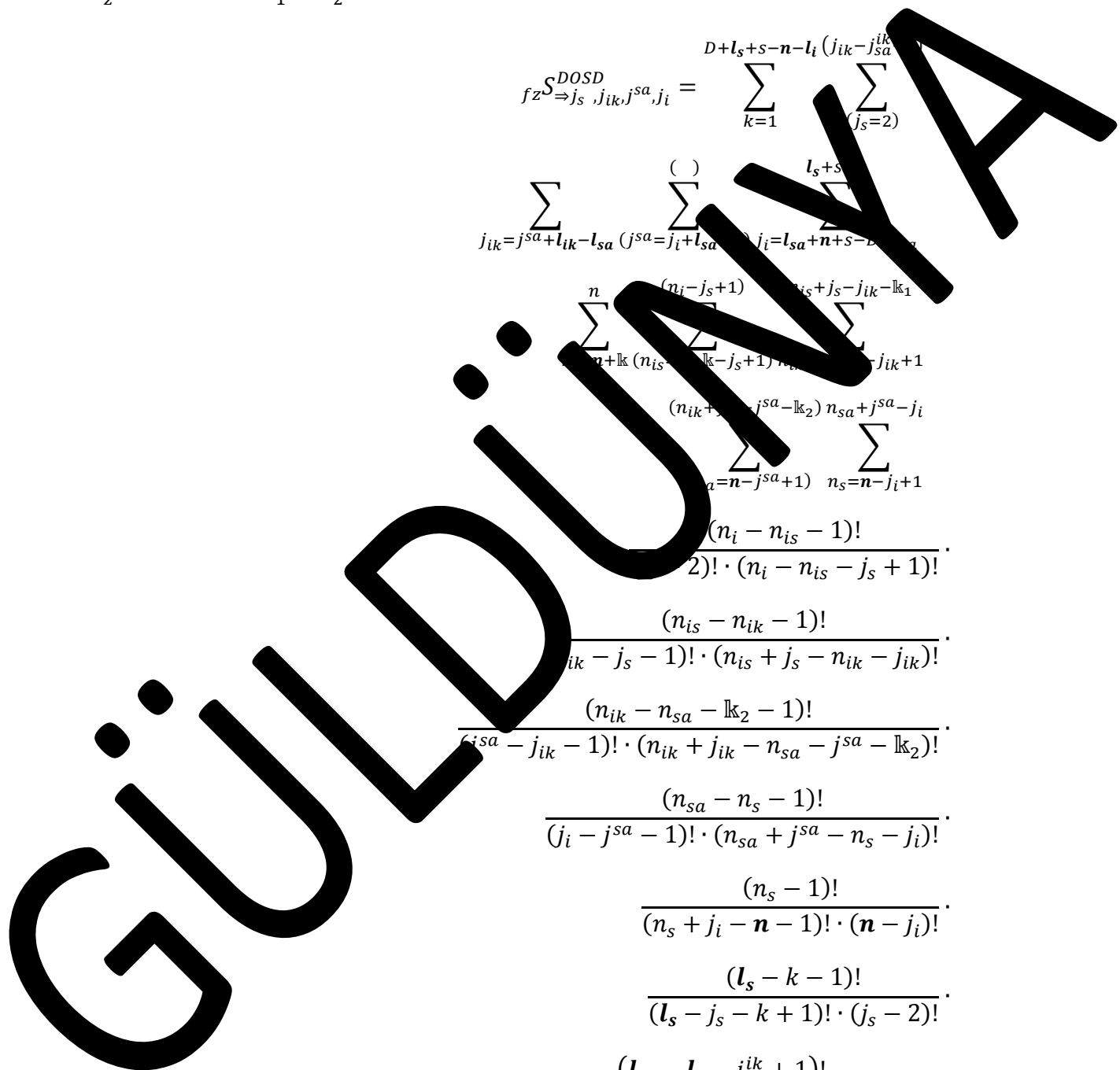
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^i+l_{ik}-l_{sa}}^{(j_{sa}=j_i+l_{sa})} \sum_{(j_i=l_{sa}+n+s-l_i)}^{(j_i+l_{sa})} \sum_{(n+l_{ik})}^{(n_{is}-\mathbb{k}-j_s+1)} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_2)} \sum_{(n_{ik}+j_{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i)} \sum_{(n_{sa}-j_{sa}+1)}^{(n_s-n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k+1}^{(l_{sa}+s-k-j_{sa}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_k-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_k)} \\
 & \frac{(n_{ik}+j_{ik}-l_k-1)! \cdot (n_{sa}-j_{sa}-j_i)}{(n_{sa}-j_{sa}+1)! \cdot (n_s-n-j_i+1)!} \\
 & \frac{(n_i-n-l_k-1)!}{(j_s-2)! \cdot (n_{ik}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_s-l_k-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_k)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(l_{sa}+s-k-j_{sa}+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}} \\ \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\ \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\ \frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!} \cdot \\ \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\ \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\ \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{l=1}^{( )} (j_s=1)$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{( ) \\ (j^{sa}=j_i+l_{sa}-l_i)}} \sum_{\substack{l_{sa}+s-i-l-j_{sa}+1 \\ j_i=l_{sa}+n+s-D-j_{sa}}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}+1) \\ (n_{ik}=n+l_k-j_{ik}+1)}}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1} \sum_{\substack{(n_{sa}+j^{sa}-j_i-l_{k_2}) \\ (n_s=n-j_i+1)}}$$

GÜLDÜSÜZ



$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{l_s + s - k} \\
 & \sum_{j_{ik} = n + \mathbb{k} + l_{ik} - l_s}^{n} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{(n_i - j_s + 1)} \\
 & \sum_{l_i = n + \mathbb{k}}^{n} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)} \sum_{j_{sa}^{ik}=j_{sa}-D-(j_{sa}^{ik}-l_i)}^{j_{sa}^{ik}=j_{sa}-D-(j_{sa}^{ik}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{j_i=l_{sa}+n+s-D-j_{sa}} \\ & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_i-l_i} \sum_{j_s=1}^{n-l_i-k+1} \sum_{j_{ik}=1}^{j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}-k-j_{sa}^{ik}+1} \sum_{j_i=l_{ik}-D}^{j^{sa}+j_{sa}^{ik}-l_i} \sum_{j_i=l_s+s-k+1}^{n-l_i-k+1} \\
 & \sum_{i=n+l_k}^n \sum_{n_{is}=n-l_k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j^{sa}+1}^{l_k+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i}^{( )} \sum_{j_{sa}=j_i+l_{sa}-l_i}^{l_{sa}+s-j_{sa}+1} \sum_{j_{ik}+2}^{j_{ik}+2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}+j_{ik}-j^{sa}-k_2)}^{(n_{sa}+j_{ik}-j^{sa}-k_2)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-k_2+1)}^{(n_{sa}=n-k_2+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-k_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}=n-k_2-j_{ik}+1)} \sum_{(n_s=n-j_i)}^{(n_{sa}=n-k_2-j_{ik}+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n+k_2-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}+1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_i-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(n_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - j_i + j_{sa} - s = j_{sa} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, l_{sa}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - k \wedge$$

$$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} (l_{ik}+j_{sa}-k-j_{sa}^{ik}+1) \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(l_{sa}-k+1)}^{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{D - l_i - j_i} (j_s = j_{ik} + l_s - l_{ik}) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - k + 1} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_{sa} - k + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{j_i} \sum_{l=0}^{j_i - k} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{j_i - k - l} \sum_{j_i = n + k}^n \sum_{n_{ik} = n + k - j_{ik} + 1}^{n - j_{ik} + 1} \sum_{n_{sa} = n + k_2 - j^{sa} + 1}^{j_{ik} - j^{sa} - k_1} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜMNA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{D+l_s+s-n-l_i}{j_s} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{n_s=n_{sa}+j_s} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_i - j_i - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_i - j_i - k - k - j_{sa}^s)!} \cdot \frac{1}{(j_{sa}^s - j_s - s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n = l_{sa} \leq D \wedge l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(l_s+j_{sa}-k)}{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n} \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \binom{n_{is}+j_s-j_{ik}-l_{k_2}}{(n_{ik}=n+l_k-j_{ik}+1)} \binom{(n_{ik}+j_{ik}-j_i)}{(n_{sa}=n+l_{sa}+1)} \binom{n_{sa}-j^{sa}-j_i}{(n_s=n-j_i)} \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(l_{sa}-k+1)}{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{n} \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \binom{n_{is}+j_s-j_{ik}-l_{k_2}}{(n_{ik}=n+l_k-j_{ik}+1)} \binom{(n_{ik}+j_{ik}-j_i)}{(n_{sa}=n+l_{sa}+1)} \binom{n_{sa}-j^{sa}-j_i}{(n_s=n-j_i)} \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDÜZYAZ

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
& \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i}^{( )} \sum_{l=j_s=1}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa} - i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i+l_s-l_{ik})}^{( )} \sum_{(l_{sa}=j_{sa}-k)}^{( )} \sum_{(j_{ik}=j_{sa}+j_{sa}^{ik})}^{( )} \sum_{(j_{sa}=l_{sa}+n)}^{( )} \sum_{(j_i=j_{sa}+l_i-l_{sa})}^{( )} \sum_{(n_i=n+l_{ik})}^{( )} \sum_{(n_s=n+l_{ik}-j_s)}^{( )} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k1})}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k2})}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

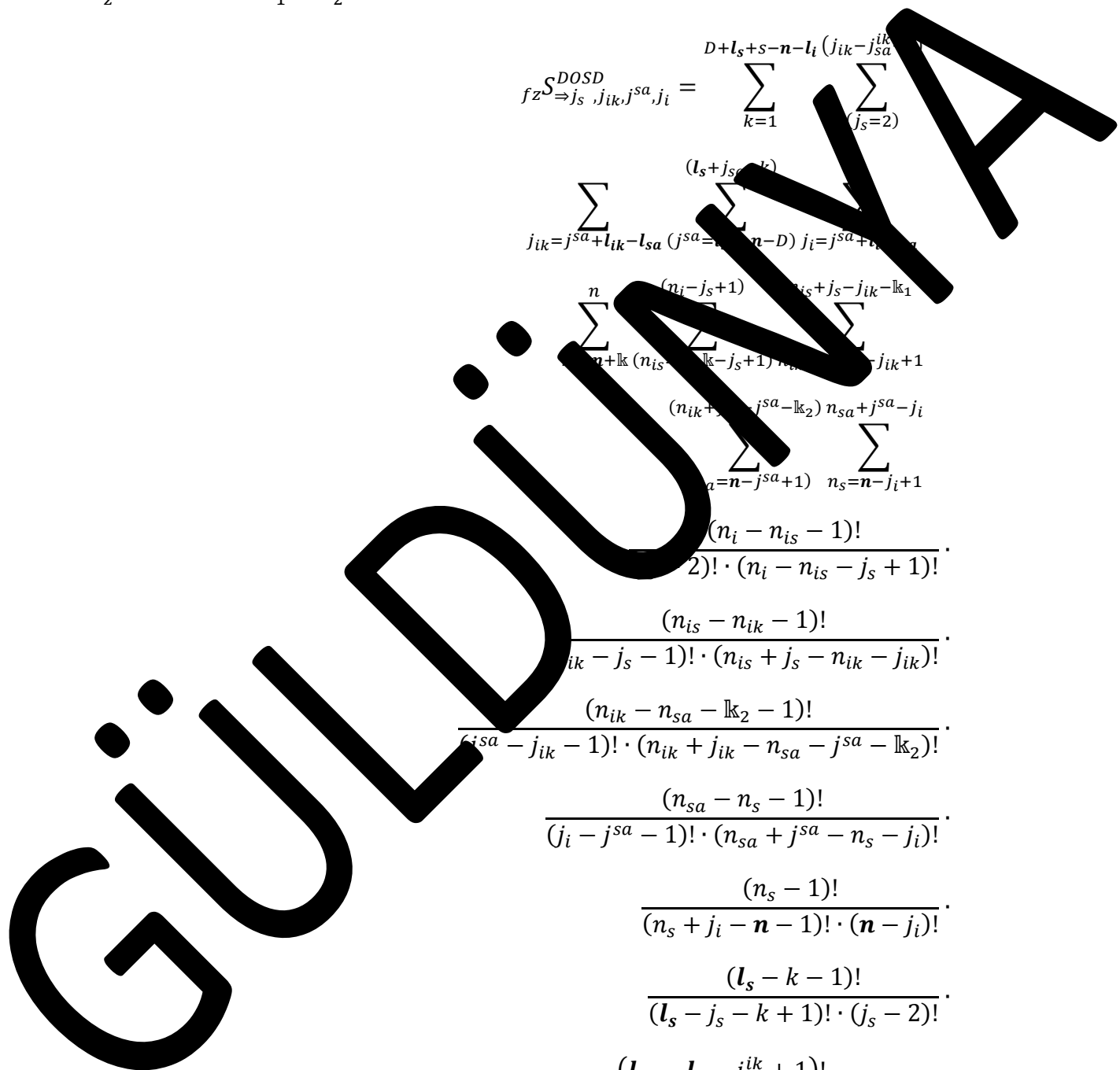
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(l_s+j_s-k)} \sum_{j_i=j_{sa}^{sa}+l_i}^{(n-D)} \sum_{n_{is}=n_{ik}-j_s+1}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{sa}-\mathbb{k}_2}^{(n_{sa}+j_{sa}^{sa}-j_i)} \sum_{n_s=n-j_{sa}^{sa}+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa}^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa}^{sa} - 1)! \cdot (n_{sa} + j_{sa}^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$





$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-k_2) n_{sa}^{j^{sa}-j_i}}{(n_{sa}-j^{sa}+1) n_s=n_{sa}-j_i} \\
 & \frac{(n_i - n_{i2} - 1)!}{(j_s - 2)! \cdot (n_{i2} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i2} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{i2} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_s} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{i_k} = n + \mathbb{k}_2 - j_{i_k} + 1}^{n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1} \\
 & \sum_{(n_{s_a} = n - j^{s_a} + 1)}^{(n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{s_a} + j^{s_a} - j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j_i - j^{s_a} - 1)! \cdot (n_{s_a} + j_i - n - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l=1}^{( )}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{i_k} = j^{s_a} + l_{i_k} - l_{s_a}}^{(l_{s_a} - l + 1)} \sum_{(j^{s_a} = l_{s_a} + n - D)} \sum_{j_i = j^{s_a} + l_i - l_{s_a}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{i_k} = n + \mathbb{k} - j_{i_k} + 1)}^{(n_i - j_{i_k} + 1)} \\
 & \sum_{n_{s_a} = n + \mathbb{k}_2 - j^{s_a} + 1}^{n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{s_a} + j^{s_a} - j_i - \mathbb{k}_2)}
 \end{aligned}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{+j_{sa} - k} \sum_{(i_k = j^{sa})}^{+j_{sa} - k} \sum_{(a = l_{sa} + n - D)}^{+j_{sa} - k} \sum_{(j_i = j^{sa} + l_i - l_{sa})}^{+j_{sa} - k} \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_i - j_s + 1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{()} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_{ik}+n-D} \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n-(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-j^{sa}+1)}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{n_s=n-j_i+1}^{(l_s+j_{sa}-j_{sa}^{ik}-j_{sa})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_i-l_i} \sum_{j_s=0}^{n-l_i-k+1} \sum_{j_{ik}=l_{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{ik}+1} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{ik}+1} \sum_{n_{is}=n+l_k}^{n-l_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{(l_{sa}-k+1)} \sum_{j_{sa}^{ik}=l_{sa}-l_{sa}}^{j_{sa}^{ik}-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}_2}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
& \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2+1)} \sum_{(j_{sa}-j_i)}^{(j_{sa}-j_i)} \\
& \sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \sum_{(n_{sa}=n-k_2-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_1)} \\
 & \frac{(n_i-n_{sa}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{sa}+1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_i-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(n_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - j_i + j_{sa} - s = j_{sa}^{ik} \wedge$$

$$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa}^{ik} - j_{sa}^{ik}$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^{s-k_1}, j_{sa}^{ik}, \dots, k_1, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-n_{is}-1)!} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{j_i} \sum_{l=0}^{j_i - k} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{j_i - k - l} \sum_{j_i = n + k}^n \sum_{n_{ik} = n + k - j_{ik} + 1}^{n - j_{ik} + 1} \sum_{n_{sa} = n + k_2 - j^{sa} + 1}^{n_{ik} - j^{sa} - k_1} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i - k_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \binom{l_{ik}-k+1}{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \binom{l_{ik}-k+1}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j_{sa}+l_i-l_{ik}} \binom{l_{ik}-k+1}{j_i=j_{sa}+l_i-l_{ik}} \\
 & \sum_{n_i=n+k}^n \binom{n}{n_i=n+k} \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \binom{n_i-j_s+1}{n_{is}=n+k-j_s+1} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \binom{n_i-j_s+1}{n_{ik}=n_{is}-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-k_2)} \binom{n_i-j_s+1}{n_{sa}=n_{ik}+j_{ik}-k_2} \sum_{n_s=n_{sa}+j_s} \binom{n_i-j_s+1}{n_s=n_{sa}+j_s} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_2 - j_s - j_i - k_1 - k_2)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2 - j_s^s)!} \\
 & \frac{(n_{sa} + j_s - j_s^s)!}{(l_s - k - 1)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_{sa} + j_{sa}^{ik} - 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} + j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s > 4 \wedge \{j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} &= \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 &\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \binom{(l_{sa}-k+1)}{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-j_{sa}} \\
 &\sum_{n_i=n+k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+k-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 &\frac{\binom{(n_{ik}+j_{ik}-j_{sa}-1)}{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-1)} \binom{(n_{sa}-j^{sa}-j_i)}{(n_s=n_{sa}+j^{sa}-n-j_i)}}{\binom{(n_s-n_{sa}-1)!}{(j_s-2)! \cdot (n_{sa}+j^{sa}-n-j_i)!}} \cdot \\
 &\frac{\binom{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}}{\binom{(n_{ik}-n_{sa}-k_2-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!}} \cdot \\
 &\frac{\binom{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}}{\binom{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}} \cdot \\
 &\frac{\binom{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}}{\binom{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}} \cdot \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \\
 &\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \binom{(l_{sa}-k+1)}{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_{sa} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{(j_s=1)}^{\binom{D}{i}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i+1}{j_{sa}^{sa}}} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{j_s=j_i+l_s-l_{ik}}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_i}^{l_s+j_{sa}^{ik}-k} \sum_{j_{ik}=j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{k_1}} \sum_{n_i=n+l_{k_2}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n_{ik}+j_{sa}-j_s-l_{k_2}} \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_{k_1} - l_{k_2}}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_s - j_i - n - l_{k_1} - l_{k_2} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l_i \wedge n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

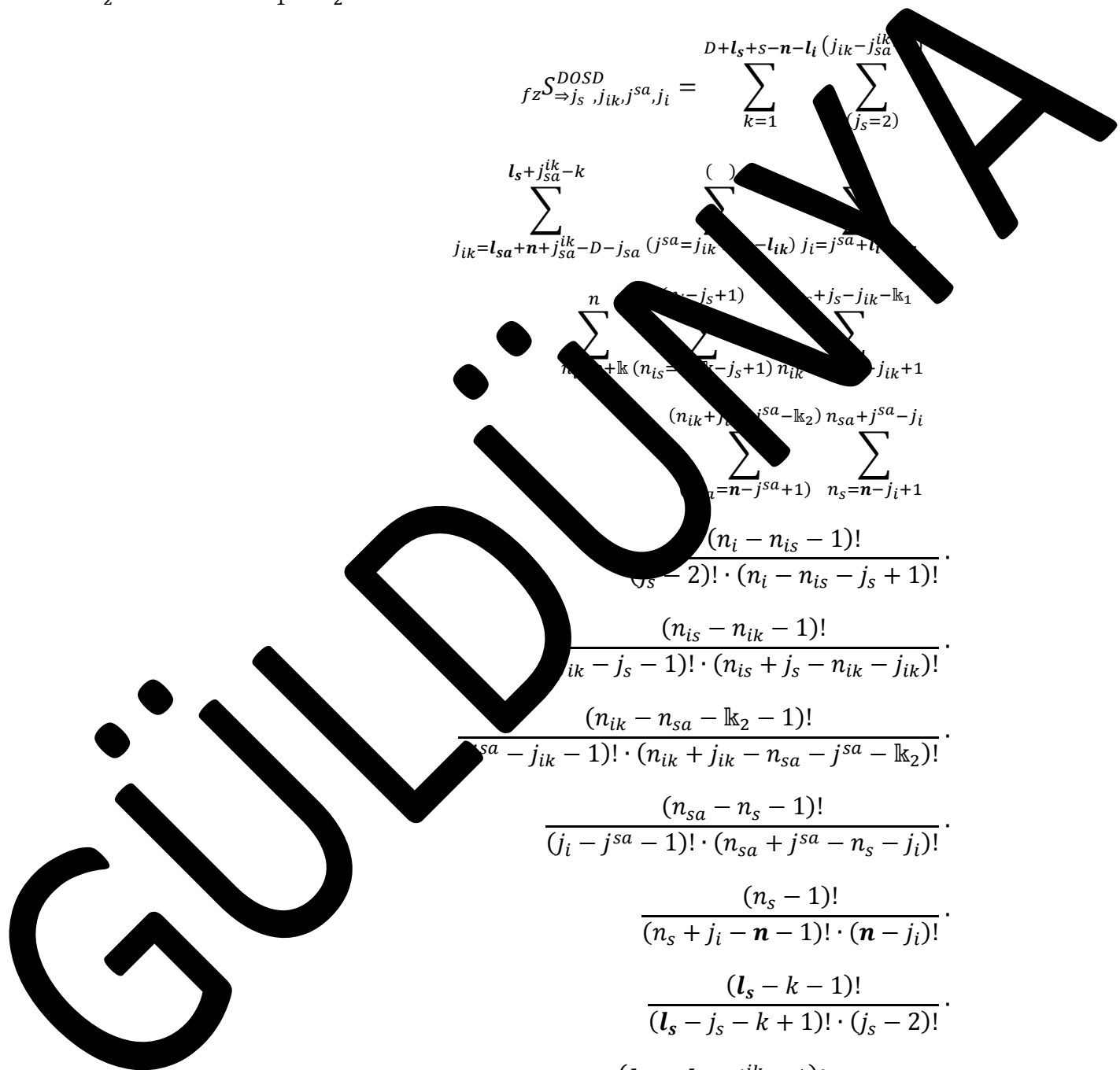
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_s=j_{ik}-l_{ik})}^{(j_s=j_{ik}-l_{ik})} \sum_{j_i=j_{sa}+l_{ik}}^{(j_i=j_{sa}+l_{ik})} \sum_{n_{is}=n_{ik}-j_s+1}^{(n_{is}=n_{ik}-j_s+1)} \sum_{n_{ik}=j_{ik}+1}^{(n_{ik}=j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}=n-j_{sa}+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k-j_{sa}+1}^{(l_{sa}+j_{sa}^{ik}-k-j_{sa}+1)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{k_2}-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_{k_2})}$$

$$\sum_{(n_{sa}=n-l_{sa}+1)}^{(n_{ik}+j_{ik}-l_{k_2})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{( )} \sum_{l=1}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik} = l_{sa} + j_{sa}^{ik} - D}^{l_s} \sum_{j_i = j_{ik} + l_{sa} - l_{ik}}^{(j_i = j_{ik} + l_{sa} - l_{ik})} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(j_i = j^{sa} + l_i - l_{sa})} \\
 & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ & \sum_{j_{ik}=n-D}^{n+j_{sa}^{ik}-D-j_{sa}} \sum_{(j_i=l_{sa}+n-D)}^{(l_{sa}-k+)} \sum_{j_i=j_{sa}+l_i-l_{sa}} \\ & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j=2}^{D+l_s+s} \binom{j_{ik} - j_{sa}^{ik} + 1}{j}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D}^{l+j_{sa}^{ik}-k} \sum_{j_{sa}=j_{ik}-j_{sa}^{ik}}^{j_{sa}=j_{ik}-j_{sa}^{ik}} \binom{j_{sa} - j_{sa}^{ik} + 1}{j_{sa}}$$

$$\sum_{n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{n-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{s=1}^{D+l_s+s-n} \sum_{k=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k}^{l_{ik}-k+1} \sum_{j_{ik}+j_{sa}-j_s}^{(l_{sa}-k+1)} \sum_{i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}-j_s+1}^n \sum_{n_{is}=n+l_s-j_s+1}^{n-j_s+1} \sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{+j_{ik}-j^{sa}-l_{k2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{sa}-l_{sa})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-l_{k_2}+1)}^{(n_{sa}=n-l_{k_2}+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_{ik}=n+l_k}^{(n_{ik}-l+1)} \sum_{(n_{ik}=n+l_k-1)}$$

$$\sum_{n_{sa}=j_{sa}+1}^{(n_{sa}-j_{sa}+1)} \sum_{(j_i=j_{sa}+l_i-l_{sa})}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot (k - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(l_s - j_s - k - 1)!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - k)!}{(D - j_i - n - j_i)!}$$

$$\frac{(D - j_i - n - j_i)!}{(D - j_i - n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n < l_s \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}$$

$$D \geq n \wedge l_s = k - 1 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i - k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, j_{sa}^i\}$$

$$s > 4 \wedge j_{sa}^i = s + k \wedge$$

$$k_2: z_1 = 2 \wedge k_2 = z_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{l_{sa}-k-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}{\sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_{sa} - l_{ik} - 1)!}{(D + j_{sa} - l_{ik} - 1)! \cdot (n - l_i)!} \cdot \sum_{j_i=1}^{(n-l_i)} \sum_{j_s=1}^{(n-l_i)} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l_{ik}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{(n-l_i)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n-l_i)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{sa}^{sa}+l_i-l_{sa}}^{( )} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{( )} \sum_{(n_{sa}=n_{ik}-j_{sa}^{sa})}^{( )} \sum_{j_{sa}-j_i}^{( )} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - j_i - l_k - l_k - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa}^a = j_i + \dots - s \wedge j_{sa}^{sa} = s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - \dots \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$n \geq n < n \wedge I = l_k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + l_k \wedge$$

$$l_{k_2}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$\begin{aligned}
 f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} &= \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \\
 &\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 &\frac{(n_{ik}+j_{ik}-k_2) n_{sa}^{j^{sa}-j_i}}{\sum_{(n_{sa}=j^{sa}+1)}^{(n_{sa}=j^{sa}+1)} n_s=n-j_i} \cdot \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 &\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \\
 &\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

GÜLDENWA



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a})! \cdot (j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{i_k}+s-n-l_i-j_{s_a}^{i_k}+2}^{l-1} \sum_{(j_s=2)}^{(l_s-k-1)} \\
 & \sum_{j_{i_k}=j_s+l_{i_k}-l_s}^{(l_{s_a}-k+1)} \sum_{(j^{s_a}=l_{s_a}+n-D)} \sum_{j_i=j^{s_a}+l_i-l_{s_a}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

GÜLDÜŞMAYA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
& \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i}^{( )} \sum_{l=1}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa} - i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_s-k-1}{i=l_{sa}+n-j_{sa}+1}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_{sa}} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}} \sum_{n_i=n+l_{ik}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j_s-l_{k2})} \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2}}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{i=2}^{(l_{sa}+n-D-j_{sa}+k)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \binom{(\quad)}{(\quad)}$$

$$\sum_{i=1}^n \sum_{j_{ik}=1}^{(n_i-j_s+1)} \sum_{j_{sa}=1}^{(n_{is}-\mathbb{k}-j_s+1)} \sum_{j_i=1}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}$$

$$\sum_{j_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

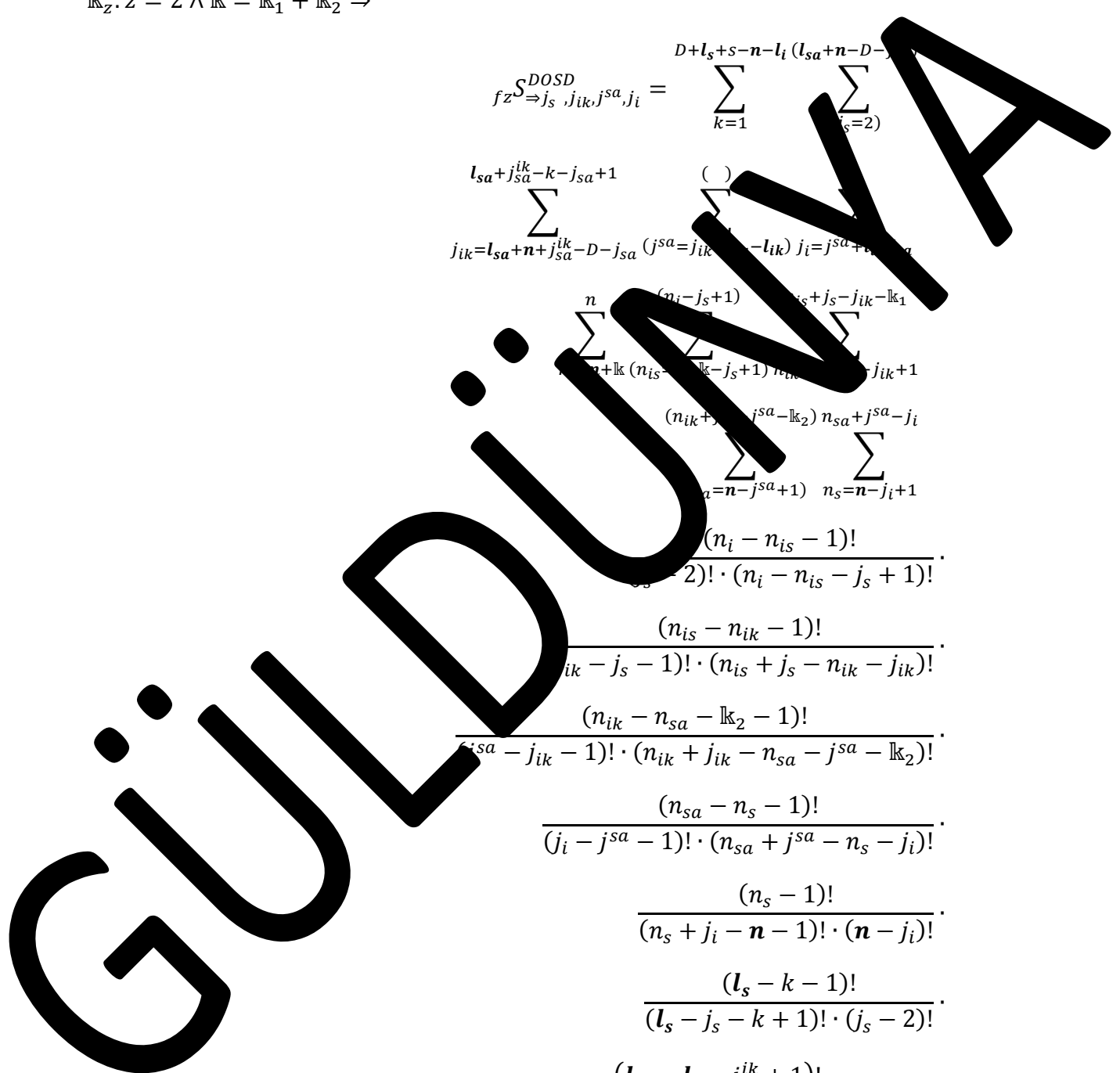
$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_2-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-l_k)}$$

$$\frac{(n_{ik}+j_{ik}-l_k) \cdot n_{sa}^{j_{sa}-j_i}}{(n_{sa}=n+l_{sa}+1) \cdot n_s=n-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l=1}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

GÜLDÜSÜZ

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s-n-l_i} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{l_{sa}+n-D-j_{sa}+1} \sum_{j_s=j_s}^{(n)} \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n)} \sum_{n=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

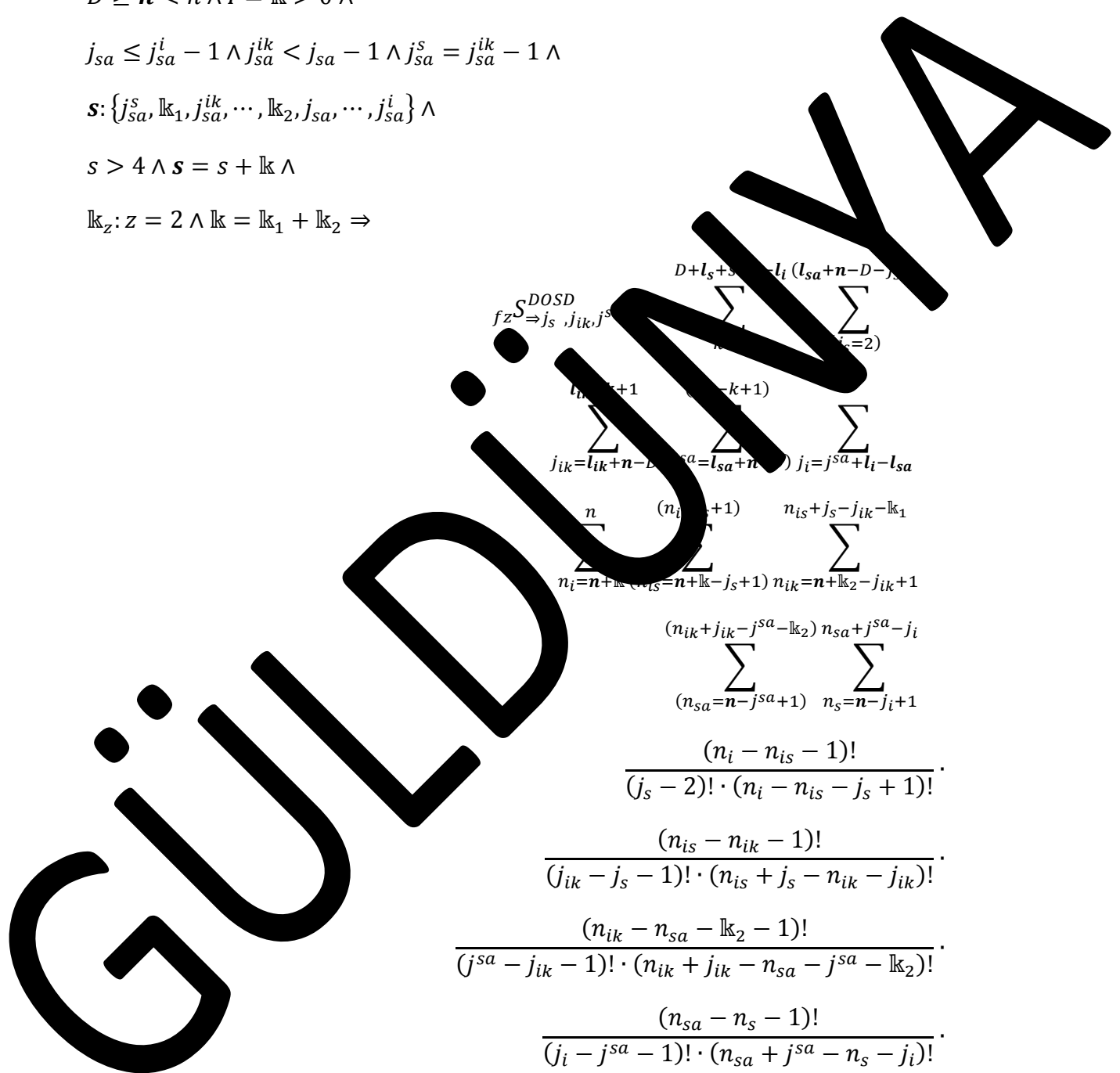
$$fz \overset{DOSD}{\Rightarrow} j_s, j_{ik}, j_s^{sa}$$

$$\sum_{i=2}^{D+l_s+s-l_i} \sum_{i=2}^{(l_{sa}+n-D-j_s)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+1} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+1} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-1)+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$





$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_s - k - 1}{l_{sa} + n - l_{sa} - j_{sa}^{sa+1}}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}-k+1} \binom{l_{sa} - j_{sa}^{sa+1}}{j_{ik} + j_{sa} - j_{sa}^{sa+1}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{l_i - k + 1}$$

$$\sum_{n_i=n+l_{sa}-j_{sa}^{sa+1}}^n \binom{n - j_{sa}^{sa+1} - j_{ik} - k_1}{n_{ik} = n + k_2 - j_{ik} + 1}$$

$$\sum_{j_{sa}=n-j_{sa}^{sa+1}}^{n - j_{sa}^{sa+1}} \sum_{n_s=n-j_i+1}^{n_{sa} + j_{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜZÜM YA

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k-1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{sa}-l_{sa})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-l_{sa}+1)}^{(n_{sa}=n-l_{sa}+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-i^{l+1})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_{ik}=n+l_k}^{(n_{ik}-i^{l+1})} \sum_{(n_{ik}=n+l_k-j_{ik}+1)}$$

$$\sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}+j_{sa}-j_i-l_{k_2})} \sum_{(n_{sa}=n-j_{sa}+1)}$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

GÜLDÜZÜMÜYA

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1) \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - 1)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)!} \cdot \frac{(n - j_i)!}{(n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - 1 \wedge$

$D \geq n \wedge l = k - 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \cup_{i=1}^k \{k_1, j_{sa}^{ik}, \dots, k_2, \dots, j_{sa}^i\}$

$> 4 \wedge j_{sa}^s + k \wedge$

$k_2: z - 2 \wedge k_2 \Rightarrow$

$$f_{z \Rightarrow j_s}^{DOSD} (j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{s_a} + j_{i_k} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{j_{i_k}=j^{s_a}+l_{i_k}-l_{s_a}} \sum_{(j^{s_a}=j_i+l_{s_a}-l_i)}^{( )} \sum_{j_i=l_s+s-k+1}^{l_{i_k}+s-k-j_{s_a}^{i_k}+1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZÜMÜ

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{ik}=l_{ik}-l_{sa}}^{(n_i-1)} \sum_{j_{sa}=j_{sa}-l_i}^{(n_i-1)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(n_i-1)} \sum_{j_s=1}^{(n_i-1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(\ )} \sum_{(j_{sa}^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=l_{ik}+n-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-k_1}^{(\ )} \sum_{(n_{sa}=n_{ik}-j_{sa}^{sa})}^{(\ )} \sum_{j_{sa}^{sa}=j_i}^{(\ )} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{sa} + 2 \cdot \dots - n_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{sa} + 2 \cdot k_1 - \dots - j_i - \dots - k - k - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_i \leq D - n - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{sa} = j_i + \dots - s \wedge j_{sa}^{sa} - s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > \dots + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$

$D > n < n \wedge I = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$



$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{(l_s+j_{sa}-k)}^{(j_i=j^{sa}+l_i-1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n-k-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-k)}$$

$$\sum_{(n_{sa}=n-k-j_{sa}+1)}^{(n_{ik}+j_{ik}-1)} \sum_{(n_s=n-j_i)}^{(n_{sa}-j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{(j_i=j^{sa}+l_i-l_{sa})}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!} \cdot \\
 & \frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_{i_s} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{j_{i_k}=j^{s_a}+l_{i_k}-l_{s_a}} \sum_{(j^{s_a}=l_{i_k}+n+j_{s_a}-D-j_{s_a}^{i_k})}^{(l_{i_k}+j_{s_a}-k-j_{s_a}^{i_k}+1)} \sum_{j_i=j^{s_a}+l_i-l_{s_a}}^{(l_s-k+1)} \sum_{(j_s=2)}^{i-1}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \\
 & \sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}
 \end{aligned}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_i=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{D+l_s+s} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_s+1} \sum_{j_i=j_{sa}^{ik}+l_{ik}-l_{sa}^{ik}}^{j_i+1} \sum_{j_{sa}^{ik}=l_{ik}+n_{is}-D-j_{sa}^{ik}}^{j_{sa}^{ik}} \sum_{j_i=l_i-l_{sa}}^{j_i+1} \sum_{n+l_k}^n \sum_{(n_{is}=n_{is}+j_s+1)}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{j_s+1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{j_s+1} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i}^{j_s+1} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{l_i=2}^{D+l_s+s-n-l_{ik}-j_{sa}^{ik}+1} \sum_{j_{ik}=2}^{l_s+j_{sa}^{ik}-k} \sum_{j_{sa}=2}^{j_{ik}+l_{sa}-l_{ik}} \sum_{n_i=n+l_{ik}-j_{sa}+1}^n \sum_{n_{is}=n+l_{ik}-j_{sa}+1}^{n-l_{ik}-\mathbb{k}_1} \sum_{n_{ik}=n+l_{ik}-j_{sa}+1}^{n+l_{ik}-j_{sa}+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \cdot \frac{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}{(n_{is}-n_{ik}-1)!} \cdot \frac{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!} \cdot \frac{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}{(n_{sa}-n_s-1)!} \cdot \frac{(n_{sa}+j_{sa}-n_s-j_i)!}{(n_s-1)!} \cdot \frac{(n_s+j_i-n-1)! \cdot (n-j_i)!}{(l_s-k-1)!} \cdot \frac{(l_s-j_s-k+1)! \cdot (j_s-2)!}{(l_{ik}-l_s-j_{sa}^{ik}+1)!} \cdot \frac{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}{(D-l_i)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \\
 & \frac{(n_{ik}+j_{ik}-k_2) n_{sa}^{sa-j_i}}{(n_{sa}=j_{sa}+1) n_s=n-j_i} \cdot \frac{(n_i-n_{i2}-1)!}{(j_s-2)! \cdot (n_{i2}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i2}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_s = n - j_i + 1)}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_i - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik} = l_{ik} + n - D}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + k_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - k_2)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{(j_s + s - n - l_i - k)} \sum_{j_{ik} = l_{ik} + j_{sa}^{ik} - k}^{(j_{ik} + j_{sa}^{ik} - k)} \sum_{j_i = j_{ik} + l_{sa} - l_{ik}}^{(j_i = j_{sa} + l_i - l_{sa})} \sum_{j_s = n + \mathbb{k}}^{(n - j_s + 1)} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{sa} + j^{sa} - j_i)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_s = n_{sa} + j^{sa} - j_i)} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$



$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z \Rightarrow j_s, j_{sa}, j_i}^{D, D, D} &= \sum_{j_s=1}^{D-n-l_i} \sum_{j_{sa}=1}^{n-l_i-j_s} \sum_{j_i=1}^{n-D-j_{sa}^{ik}} \\ &= \sum_{j_{ik}=j_{sa}^{ik}+n-D}^{l_{ik}-k+1} \sum_{j_{sa}=j_{sa}^{ik}+l_{sa}-l_{ik}}^{(j_{sa}^{ik}+l_{sa}-l_{ik})} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}^{(j_{sa}^{ik}+l_i-l_{sa})} \\ &= \sum_{i=n+\mathbb{k}}^n \sum_{i=n+\mathbb{k}}^{n-l_j+1} \sum_{i=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &= \sum_{i=n+\mathbb{k}}^n (n_{is}=n+\mathbb{k}-j_s+1) \sum_{i=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &= \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ &= \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &= \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &= \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ &= \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ &= \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \frac{(l_s - k + 1)!}{(l_{ik} + n - j_{sa}^{ik} + 1)!} \cdot \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{n_{sa}=j_{ik}+l_{sa}-j_{ik}}^{j_{sa}-j_{ik}} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_{ik}-k+1} \cdot \\
& \sum_{n_i=n+l_{ik}-j_{ik}}^n \sum_{n_s=n+l_{ik}-j_{ik}-1}^{j_s+1} \sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{j_{ik}-l_{k1}} \cdot \\
& \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_2}} \\
 & \sum_{(n_{sa}=n-l_{k_2}-j_{ik}+1)}^{(n_{ik}+j_{ik}-l_{k_2})} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{ik}-l_{k_2})} \sum_{(j_i=j^{sa}+l_i-l_{sa})} \\
 & \frac{(n_i - n_{k_2} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{s_2} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\quad)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(\quad)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
& \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
& \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 j_{sa}^{DOSD} &= \sum_{k=1}^{l-1} \binom{()}{(j_s=j_{ik}+l_s-l_{ik})} \\
 &\sum_{j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{()}{(j_{sa}^{ik}+l_{sa}-l_i)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-k-s+1} \\
 &\sum_{i=n+\mathbb{k}}^n \binom{(n_i-j_s+1)}{(n_{is}=n+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 &\sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\
 &\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=j_{ik}+l_{sa}-l_{ik}}^{i^{l-1}} \binom{(\cdot)}{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \binom{(\cdot)}{(\cdot)} \sum_{j_i+l_{sa}-l_i}^{l_i} \sum_{j_{sa}^{ik}=k-s+2}^{l_i} \\
 & \sum_{n_i=n+l_{sa}-j_s+1}^n \sum_{n_{is}=n+l_{sa}-j_s+1}^{n+l_{sa}-j_s+1} \sum_{n_{ik}=n+l_{sa}-j_{ik}+1}^{n+l_{sa}-j_{ik}+1} \\
 & \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n+l_{sa}-j_{sa}^{ik}+1} \sum_{n_s=n-j_i+1}^{n+l_{sa}-j_{sa}^{ik}+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik} (j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=1}^{l_i-i+1}$$

$$\sum_{n_i=n+k (n_{ik}=n-j_{ik}+1)}^n \sum_{n_{ik}+j_{ik}-j^{sa}-k_1}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}}^{(n_s=n-j_i+1)} \sum_{(n_s-n_{sa}-j^{sa}-k_1-1)!}$$

$$\frac{(j_i-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-j^{sa}-k_2)!}{(j_i-j_{ik}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa} (j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-k-s+1}$$

$$\sum_{n_i=n+k (n_{is}=n+k-j_s+1)}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$\sum_{(j_s=1)}^{( )}$$

$$\sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa})} \sum_{(j_i=s)}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k})}^{\mathbf{n}} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_i)}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_i+j_{sa}-s)}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}-k-s+1)}^{( )} \sum_{(j_{ik}=j_{sa}^{ik}-k-s+1)}^{( )}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=j_s-j_{ik})}^{(n_{is}=j_s-j_{ik})} \sum_{(n_{ik}=j_{sa}^{ik}-k-s+1)}^{(n_{ik}=j_{sa}^{ik}-k-s+1)}$$

$$\sum_{(n_{sa}=n-j_i+1)}^{(n_{sa}=n-j_i+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^l-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=l_{ik}+j_{sa}^{ik}-k-s}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{k_1}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-1)! \cdot (n_{sa}-j^{sa}-j_i)!}{(n_{sa}=n+l_{sa}+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{sa}+j^{sa}-j_s+1)!} \\
 & \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{()} \sum_{j_i=s}^{l_{sa}+s-i^l-j_{sa}+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D - l_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{i-1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = s + 2}^{l_{ik} + j_{sa}^{ik} - k - s + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i'} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\
 & \sum_{k=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_{ik}+j_{sa}^{ik}-k-s+2}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZÜM

A

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{l_i} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_{sa}-k+1} \sum_{n_i=n+k}^{(n-n_s+1)} \sum_{n_{is}=n+k-j_s+1}^{(n-n_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{( )} \binom{( )}{j_s=1}$$

$$\sum_{j_{sa}=j_{sa}}^{(l_{sa}+l+1)} \sum_{j_{sa}+s-j_{sa}+1}^{l_i-l}$$

$$\sum_{n_i=n}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}$$

$$\sum_{n_{ik}+j_{sa}-k_1}^{(n_{sa}+j_{sa}-j_i-k_2)} \sum_{n_{sa}=k_2-j_{sa}+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{sa} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜNYA

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\cdot)} \sum_{j_i=s+1}^{l_{ik}+j_{sa}^{ik}-k-s+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa})!} \cdot \frac{1}{(j_{sa} - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j^{sa}=j_{sa})}^{(\cdot)} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}^{(\cdot)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa})! \cdot (n - s)!}$$

GÜLDENYA



$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^{SDSD} = \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

GÜLDÜNKYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=1}^{l_s} \sum_{j_i=j_{ik}+l_s-1}^{l_s} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_s} \sum_{j_i=l_s+k-1}^{l_i-k+1} \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \binom{()}{j_s = j_{ik} + l_s - l_{ik}}$$

$$\sum_{j_{ik} = j_{sa}^{ik} - j_{sa} + l_{sa}}^{i-1} \binom{()}{j_s = j_{sa}^{ik} - j_{sa} + l_{sa}}$$

$$\sum_{n_{sa} = \mathbb{k}_2 - j_{sa} + 1}^{n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_1} \binom{()}{j_s = j_{sa}^{ik} - j_{sa} + l_{sa}}$$

$$\frac{(n_i - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{sa}^{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{i-1} \binom{()}{j_s = j_{ik} + l_s - l_{ik}}$$

$$\sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \binom{()}{j_s = j_{sa}^{ik} - j_{sa} + l_{sa}} \sum_{j_i = s+1}^{l_s + s - k}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1 - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(l_s - j_s - k_1 + 1)! \cdot (j_s - k_1)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i - j_i)!}$$

$$\sum_{k=i}^{\sum} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1 - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-l-1} \sum_{l=2}^{k-j_{sa}^{ik}+1} \sum_{j_{ik}=j_{sa}-l}^{j_{sa}} \sum_{j_i=s+1}^{j_{sa}-l} \sum_{n_i=n+j_{sa}-j_{ik}-1}^{n-j_{sa}+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n-j_{sa}+1} \sum_{n_{sa}=n-j_{sa}+1}^{n+j_{ik}-j_{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n+j_{ik}-j_{sa}-\mathbb{k}_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k}^{l_i - k + 1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k}^{n_{is}+j_s-j_{ik}-k} \\
 & \sum_{(n_{ik}+j_{ik}-k_1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_{sa}=j^{sa}+1)}^{(n_{sa}=j^{sa}+1)} \sum_{(n_s=n-j_i)}^{(n_s=n-j_i)} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{l_i - i^{l+1}} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=s}^{l_i - i^{l+1}}
 \end{aligned}$$

GÜLDENWASSER

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - j_i - n - l_s + 1)!}{(n_s - j_i - n - l_s + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=j_{ik}}^{i-1-k} \sum_{j_i=s}^{i-1-k} \sum_{l_s=l_{ik}}^{i-1-k} \sum_{l_i=l_{ik}}^{i-1-k} \sum_{n_{sa}=1}^{i-1-k} \sum_{j_{ik}=j_{sa}}^{i-1-k} \sum_{j_i=s}^{i-1-k} \sum_{l_s=l_{ik}}^{i-1-k} \sum_{l_i=l_{ik}}^{i-1-k} \sum_{n_s=n_{sa}+j_{sa}-j_i}^{i-1-k} (n_{ik} - j_{ik} - l_{k_1} + 1)$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - n - l_k - j_{sa})! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_i \leq D + s - n \wedge$

$1 < j_s \leq j_{ik} - j_{sa} + 1 \wedge j_i + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa} - j_{sa} \wedge$

$j_{sa} = j_i + j_{sa} - j_{sa} + j_{sa} + s - j_{sa} \wedge j_i \leq n \wedge$

$l_{ik} - j_{sa} + 1 = l_s \wedge l_{sa} + j_{sa} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < n \wedge l_i = l_k >$

$j_{sa} - j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > j_{sa} = s + l_k \wedge$

$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{i-1-k} \right)$$



$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=s+1}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-\mathbb{k}_2)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-1)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{l \binom{( )}{j_s=1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{( )}{j^{sa}=j_i+j_{sa}-s}} \sum_{j_i=s}^{l_{sa}+s-l-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - a)!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (a - j_{sa})!} \cdot$$

$$\frac{\binom{D - 1}{D + j_i - a - l_i} + \binom{D - 1}{D + j_i - a - l_i}}{(D + j_i - a - l_i)! \cdot (n - l_i)!} +$$

$$\left( \sum_{k=0}^{i-1} \sum_{s=l_{ik}}^{n-l_{ik}} \binom{n-l_{ik}}{s} \binom{n-l_{ik}}{s-l_{ik}} \right)$$

$$\sum_{j_{ik}=j_{ik}+1}^{n-l_{ik}} \sum_{(j^{sa}=j_{sa}+1)}^{n-l_{ik}} \sum_{j_i=s+2}^{n-l_{ik}} \binom{n-l_{ik}}{s} \binom{n-l_{ik}}{s-l_{ik}} \binom{n-l_{ik}}{s-l_{ik}}$$

$$\sum_{i=n+\mathbb{k}}^{n-l_{ik}} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n-l_{ik}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n-l_{ik}} \binom{n-l_{ik}}{s} \binom{n-l_{ik}}{s-l_{ik}} \binom{n-l_{ik}}{s-l_{ik}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{n-l_{ik}} \sum_{n_s=n-j_i+1}^{n-l_{ik}} \binom{n-l_{ik}}{s} \binom{n-l_{ik}}{s-l_{ik}} \binom{n-l_{ik}}{s-l_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=j_{ik}+l_s-l_{sa}}^{l_s+j_s-l_{sa}-s-1} \sum_{j_i=l_s+s-k+1}^{l_s+j_s-l_{sa}-s-1} \sum_{j_{ik}=j_{sa}+1}^{j_{sa}+1} \sum_{j_{is}=n+1}^{n} \sum_{n_{is}=n_{ik}-j_s+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik} - l_{ik}}^{l_i - 1} \binom{l_i - 1}{j_{ik} - l_{ik}} \sum_{j_{sa}^{ik}=j_{sa}^{ik} - l_{ik}}^{l_i - 1} \binom{l_i - 1}{j_{sa}^{ik} - l_{ik}} \sum_{j_i=j_{sa}^{ik} - l_{ik}}^{l_i - 1} \binom{l_i - 1}{j_i - l_{ik}}$$

$$\sum_{n_i=n+l_{sa}-j_{sa}^{ik}-l_{ik}}^n \binom{n}{n_i} \sum_{n_{is}=n+l_{sa}-j_{sa}^{ik}-l_{ik}-j_i}^{n-l_{sa}-j_{sa}^{ik}-l_{ik}-j_i} \binom{n-l_{sa}-j_{sa}^{ik}-l_{ik}-j_i}{n_{is}} \sum_{n_{ik}=n+l_{sa}-j_{sa}^{ik}-l_{ik}-j_i}^{n-l_{sa}-j_{sa}^{ik}-l_{ik}-j_i} \binom{n-l_{sa}-j_{sa}^{ik}-l_{ik}-j_i}{n_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \sum_{(j_s=l_{ik})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=j_{sa})}^{l_i-i^{l+1}} \sum_{(j_i=j_{sa}+1)}$$

$$\sum_{(n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}-j_{ik}+1)}$$

$$\sum_{(n_{sa}-j_{ik}-j^{sa}+1)}^{(n_{sa}+j_i-j_{ik})} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - j_{ik} - l_{k1} - 1)!}{(j_i - 2)! \cdot (n - n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{\binom{(\cdot)}{j^{sa}=j_i+j_{sa}-s}} \sum_{\binom{(\cdot)}{j_i=s+1}}^{l_s+s-k} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\cdot)}{n_{is}=n+\mathbb{k}-j_s+1}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \\
 & \sum_{\binom{(\cdot)}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{\binom{n-s-j_s-s}{n-s-j_s-s}} \cdot \\
 & \frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(D - l_i)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{\binom{(\cdot)}{j_s=1}} \sum_{\binom{(\cdot)}{j_i=s}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{(\cdot)}{j^{sa}=j_{sa}}} \sum_{j_i=s} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\cdot)}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{(\cdot)}{n_s=n_{sa}+j^{sa}-j_i}} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_{sa}^{ik}} = \sum_{j_{sa}^{ik}=1}^{l-1(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_i=2}^{l_s+s-k} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+l_{sa}^{ik}}^{(j_{sa}^{ik}+l_{sa}^{ik})} \sum_{j_i=s+1}^{(n_s+1)} \sum_{n_i=n+\mathbb{k}}^{(n_{is}+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{(n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^{ik}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$



$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}} \sum_{(j_{sa}^{ik}=i+j_{sa}-s)} \sum_{j_{ik}+j_{sa}-j_{ik}+1}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{ik}-j_{sa}-l_{k_2})}^{(n_{ik}-j_{sa}-l_{k_2})} \sum_{j_{sa}-j_i}^{j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{( )} \sum_{i=1}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=s}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n-k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-k_2} \\
 & \frac{(n_i - j_{ik} - 1)!}{(j_i - 2)! \cdot (n_{ik} - n_{ik} - k_1 + 1)!} \cdot \frac{(n_{sa} - n_{sa} - k_1 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right) \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=s+2}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s-1) l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_s + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}^{l_i-k+1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{k}} \sum_{l=\binom{D-k}{j_s=1}}^{\binom{D-k}{j_s=1}} \\
 & \sum_{j_{ik}=j^{sa}+1}^{l_{sa}} \sum_{(j^{sa}=j_{sa})}^{(l_{ik}+j_{sa}-i-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-i+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{i=1}^{l-1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{( )} \sum_{j_i=s+1}^{( )} \sum_{j_i=s+1}^{( )}$$

$$\sum_{n_i=n+l_k}^{( )} \sum_{n_i=n+l_k-j_s}^{( )} \sum_{j_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{( )}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i}^{( )}$$

$$\frac{(n_{sa} + 2 \cdot j^s - 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} - l_{k1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{j^{sa}=j_{sa}}^{( )} \sum_{j_i=s}^{( )}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s) \cdot (n - s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$D \geq n < n \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 > j_{sa} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz \overset{DOSD}{S \Rightarrow j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=s+1}^{l_s+s-k}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i - 1)!} \cdot \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} + j_{sa} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_s - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j^{sa} - k + 1)! \cdot (j^{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - j^{sa} - 1)! \cdot (j_{ik} - j^{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_s + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_s)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{\binom{D}{k}} \sum_{l=j_s=1}^{\binom{D}{l}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{j_{sa}^{ik}-j_{sa}} \sum_{j^{sa}=j_i+l_{sa}-l_i}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_i - i^{l+1}} \sum_{j_s=1}^{(j_s)} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{l_{ik} - i^{l+1}} \sum_{j_i=l_i - i^{l+1}}^{(j_i)} \sum_{j_i=l_i - i^{l+1}}^{l_i - i^{l+1}} \\
 & \sum_{n_i=n - i^{l+1}}^n \sum_{n_{ik}=n + k - j_{ik} + 1}^{(n_{ik})} \\
 & \sum_{k_2=j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - k_1} \sum_{(n_{sa} + j^{sa} - j_i - k_2)} \\
 & \sum_{(n_s = n - j_i + 1)}^{(n_s)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=s}^{l_s+s-k} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-l_{k_1}}^{(n_{ik}=n_{is}+j_{ik}-l_{k_1})} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(\cdot)} \sum_{n_s=n_{sa}+j_{sa}^{ik}}^{(\cdot)} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^{ik})!} \cdot \\
 & \frac{1}{(n_{is} + j_{sa}^{ik} - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^i \sum_{(j_s=1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{(j_{sa}^{ik}=j_{sa})}^{(\cdot)} \sum_{j_i=s}^{(\cdot)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(\cdot)} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}^{(\cdot)} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{(\cdot)}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^{ik})! \cdot (n - s)!}$$

GÜLDENYA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}}^{DOSD} j_i = \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}^{ik}+1} \sum_{(j_{sa}^{ik}=j_{sa}^{ik}+1)}^{(l_{sa}^{ik}-k-s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=j_{ik}+l_s-1}^{l_i-l_{sa}} \sum_{j_i=j_s}^{l_i-l_{sa}} \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{j_{sa}=l_{ik}+j_{ik}-k-s+2}^{l_{ik}-s+1} \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_i+j_{sa}-i^{l-s+1})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n_{ik}+k}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=n+l_{k-1}-j_{ik}+1}$$

$$\sum_{n_{sa}=n_{ik}-j_{sa}+1}^{(n_{ik}-j_{sa}-k_1)} \sum_{n_{sa}=j_{sa}-j_i-k_2}^{(n_{ik}-j_{sa}-k_1)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_{ik}+j_{sa}^{ik}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D - n - l_i - j_i)!}$$

$$\sum_{k=i}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$



$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{j_s=j_{ik}+s-l_{ik}}^{i^{l-1}} \sum_{j_{sa}=j_{sa}^i-l_{ik}}^{( )} \right)$$

$$\sum_{j_{ik}=j_{sa}^i+l_{ik}+j_{sa}-s+1}^{j_{sa}+j_{sa}^{ik}-j_{sa} (l_{ik}+j_{sa}^i-s+1)} \sum_{j_{sa}^i=j_{sa}^i+1}^{(j_{sa}^i+1)} \sum_{j_{sa}^i=j_{sa}^i+1}^{j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+k}^{(n+k-j_s)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n+k_2-j_{ik}+1)} \sum_{n_{sa}=n-j_{sa}+1}^{(n+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa}^i + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}^{ik}-k-s+2)}^{(l_{sa}-k+1)} \sum_{j_{ik}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+1}^{n_{is}+j_{ik}-l_{k1}+1}$$

$$\sum_{(n_{ik}+j_{ik}-l_{k2})}^{(n_{ik}+j_{ik}-l_{k2})} \sum_{(n_{sa}=n-j_s)}^{(n_{sa}+j_{sa}-l_{k2})}$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{i^l}^{(j_s=1)}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \binom{l_{sa}-i_{l+1}}{(j_{sa}=j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \binom{n_i-j_{ik}+1}{(n_{ik}=n+l_k-j_{ik})} \\
 & \sum_{n_{sa}=n+l_{k_2}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \binom{n_{sa}+j_{sa}-j_i-l_{k_2}}{(n_s=n-j_i+1)} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}-1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_s-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_s+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(n_s+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{i_{l-1}} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{l_{ik}+j_{sa}^{ik}-k-s+1}{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \binom{n_i-j_s+1}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i - l_{sa} - l_s - s)!}{(j_i + l_i - j_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-k-s+2)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{l \binom{D}{j_s=1}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i^{l+1})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-i^{l+1}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZÜM

A

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}} \sum_{(j_s=j_{ik}-l_{ik})} \sum_{(l_{ik}+j_{sa}-k-s+1)} \sum_{(n_i=n+k)} \sum_{(n_s=n_{sa}+j_{sa}-j_i)} \sum_{(n_s=n_{sa}+j_{sa}-j_i)} \frac{(n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot j_{sa}^{ik} + 2 \cdot j_{sa} - k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^l \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}=j_{sa})}^{( )} \sum_{j_i=s}$$

GÜLDENYA

$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})! \cdot (n - s)!} \cdot \frac{(D - l_i)}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa}^{ik} - s = l_{sa}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa}$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{SDOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}{(n_{sa}=n-j^{sa}+1) n_s=n-j_i+1}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i=1}^{(n-l_i)} \sum_{j_s=1}^{(n-l_i)} \sum_{j_{ik}=j_{sa}^{ik}}^{(l_i+j_{sa}^{ik}-s+1)} \sum_{a=j_{sa}}^{(n-l_i)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n-l_i)} \\
 & \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k-j_{ik}+1}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa})}^{( )} \sum_{(j^{sa}=j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - j_i - l_k - l_k - j^{sa})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k1}+1)}^{( )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{( )}$$

GÜLDÜZÜMÜŞ

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} \sum_{j_{sa}^s, j_i} \sum_{j_{sa}, j_i} &= \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \\ &\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j_{sa}=j_{sa}+1)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\ &\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ &\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \end{aligned}$$

GÜLDÜNYA

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_s=2}^{i^{l-1} (l_s - k + 1)}$$

$$\sum_{j_i=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-s+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_{is}-s+1)} \sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \binom{( )}{j_s = i}$$

$$\sum_{j_{ik} = j_{sa}^{i+1} + l_{ik} - l_{sa}} \binom{l_i + j_{sa} - i^{l-s+1}}{(j_{sa} = j_{sa})} \sum_{j_i = j_{sa} - l_{sa}}$$

$$\sum_{n_i = j_{ik} + 1}^{(n_i - j_{ik} + 1)}$$

$$\sum_{n_{sa} = j_{ik} - j_{sa}^{i+1}}^{n_{ik} + j_{ik} - j_{sa} - k_1} \sum_{(n_{sa} + j_i - k_2)}^{(n_{sa} + j_i - k_2)}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{i^{l-1}} \binom{( )}{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{i+1} + l_{ik} - l_{sa}} \binom{l_s + j_{sa} - k}{(j_{sa} = j_{sa} + 1)} \sum_{j_i = j_{sa}^{i+1} + l_i - l_{sa}}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)!}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - l_i)!}{(D - l_i - n - l_i - j_i)!}$$

$$\sum_{k=i}^{\ } \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k}_1 - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$



$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=l_s+j_{sa}-k+1)}^{(l_{sa}-k+1)} \sum_{j_{ik}^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k+1}^{n_{is}+j_s-k-l_{k1}+1} \\
 & \sum_{(j_{sa}=n-j_s+1)}^{(n_{ik}+j_{ik}-l_{k2})} \sum_{(j_{sa}-j_{ik}+1)}^{(n_{sa}+j_{sa}-j_{ik})} \\
 & \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{(\cdot)} \sum_{(j_s=1)}^{(\cdot)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \binom{l_{sa}-i_{l+1}}{(j_{sa}=j_{sa})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \binom{n_i-j_{ik}+1}{(n_{ik}=n+l_k-j_{ik})} \\
 & \sum_{n_{sa}=n+l_{k_2}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \binom{n_{sa}+j_{sa}-j_i-l_{k_2}}{(n_s=n-j_i+1)} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}-1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_s+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(n_s+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{i_{l-1}} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{l_s+j_{sa}-k}{(j_{sa}=j_{sa}+1)} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j_{sa}-j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i - l_{sa} - l_s)!}{(j_i + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa} - l_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{(\cdot)} \sum_{l(j_s=1)}^{(\cdot)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=j_{sa})}^{l_i-i^{l+1}} \sum_{j_i=j^{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_s=j_{ik}+j_s-l_{ik})} \sum_{(j_{sa}=j_{sa}^{ik}+j_s-l_{ik})} \sum_{(j_i=j_{sa}+j_s-j_{sa})} \sum_{(l_{ik}=n_{is}+j_s-j_{ik}-l_{k1})} \sum_{(n_i=n+l_{k1})} \sum_{(n+l_{k1}-j_s+l_{k2})} \sum_{(n_{sa}=n_{is}+j_s-j_{ik}-l_{k1})} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot j_{sa}^{ik} + 2 \cdot j_{sa} - l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^{ik})!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^i$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}^{ik}=j_{sa})} \sum_{j_i=s}$$

GÜLDENYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s) \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa}^{ik} - s > l_{sa}$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 < j_{sa}$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{\Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(l_s+j_{sa}-k)}^{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!}$$

$$\sum_{j_{ik}=l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)} \sum_{(j_s=j_{sa})}^{(j_s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

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$$\begin{aligned}
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+ \\
 & \left( \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \right. \\
 & \sum_{j_{ik}=j_{sa}+l_{ik}-l_{sa}}^{(l_s + j_{sa} - k)} \sum_{(j_{sa}=j_{sa}+1)}^{l_i - k + 1} \sum_{j_i=j_s - j_{sa} + 1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is} + j_s - k - l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik} + j_{ik} - j_{sa} - l_{k_2})} \sum_{n_{sa} + j_{sa} - j_i} \\
 & \frac{(j_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{is} - l_{k_1} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+
 \end{aligned}$$

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$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{l_i - k + 1}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{l_i - k + 1} \sum_{j_i=j^{sa}+s-j_s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\frac{(n_{ik}+j_{ik}-j_s-1)! \cdot (n_{sa}+j_{sa}-j_i-1)!}{(n_{sa}=n-l_{sa}+1)! \cdot (n_s=n-j_i)!} \cdot \frac{(n_s - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - 1)!}$$

$$\frac{(n_{ik} - n_{is} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{( )}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}+1} \binom{l_{ik}+j_{sa}-l_{ik}-j_{sa}+1}{j_i-l_{ik}} \binom{l_i-l_{ik}+1}{j_i-j_{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})} \binom{n_i-j_{ik}+1}{n_{ik}} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1} \sum_{(n_s=j_i+1)} \binom{n_{sa}+j_{ik}-j^{sa}-l_{k_1}}{n_{sa}} \binom{n_{sa}+j^{sa}-j_i-l_{k_1}}{n_s} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-1)!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_i-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_i+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_{ik}-j_{ik}-l_s-j^{sa}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j^{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_i+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) - \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}-j^{sa}+1)} \binom{l_s+j_{sa}-k}{j_s} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{l_s+j_{sa}-k}{j_s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \binom{n_i-j_s+1}{n_{ik}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i - 1)!}{(D + j_i - 1 - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$\sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{( )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{( )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < n \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa}^{ik})}^{(l_s+j_{sa}-k)} \sum_{n_i=n+1}^n \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{ik}+1)}^{(n_{ik}+1)} \sum_{(n_{sa}+k_2-j_{ik}+1)}^{(n_{sa}+k_2-j_{ik}+1)} \sum_{(n_{sa}+j_{ik}-j_{sa}^{ik})}^{(n_{sa}+j_{ik}-j_{sa}^{ik})} \sum_{(n_{sa}=n_{sa}^{ik}+1)}^{(n_{sa}=n_{sa}^{ik}+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜSÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa} (l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j_{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j_{sa}+l_i} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}-j_i)!(n_{sa}-j_{sa}-j_i)}{(n_{sa}-n_{is}+1)!(n_s-n-j_i)} \\
 & \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (l_i-j_s+1)!} \\
 & \frac{(n_{ik}-k_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{is}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{i_1}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j_{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}+j_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)!(n_{ik}+j_{is}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)!(n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l(j_s=1)}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{sa}=j_{sa})}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j_{sa}^{ik}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{sa} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} - j_{sa} - j_{sa}^{ik} - j_{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{\binom{D}{i}} \sum_{(j_s=1)}^{\binom{D}{i}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j^{sa}=l_{ik}+j_{sa}^{ik}-i-l-j_{sa}^{ik}+2)}^{(l_i+j_{sa}^{ik}-i-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{i-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}-j_{sa})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{(j_i=j^{sa}+l_i-l_{sa})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜMÜŞA



$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{( )} \sum_{(j^{sa}=j_{sa})}^{( )} \sum_{j_i}^{( )}$$

$$\sum_{n_i=n+l}^n \sum_{(n_{ik}=n_i-l_{ik_1+1})}^{( )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}^{( )} \sum_{(n_s=n_{sa}+j^{sa})}^{( )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_i - s - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_i - n_{ik} - l_{k_1} - s - l_{k_1})! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa} - 1 \leq j_s \leq j_{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n - l = l_{k_1} \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}, \dots, j_{sa}^l\} \wedge$$

$$s > 5 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: l_{k_2} \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{( )} \sum_{l=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i+j_{sa}-l-s+1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i=0}^{l-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_{sa}}^{l_{ik}-k+1} \sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜMNA

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-l_{ik}+1)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}} \sum_{(n_s=n_{sa}+j^{sa})}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - s - l_{ik})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - l_{ik} - s - l_{ik})! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-l_{ik}-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa} - 1 \leq j_s \leq j_{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} \geq l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k_1} \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 5 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: \dots \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz \overset{DOSD}{\Rightarrow} j_s, j_{ik}, j^{sa}, j_i = \left( \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{l=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa} - l + 1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

GÜLDÜZYAZ

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{j_s = j_{ik} + l_s - l_{ik}}^{i^{l-1}} \right) \\
 & \sum_{j_s = j_{sa} + 1}^{k+1} \sum_{j_i = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(l_{sa} + 1)} \sum_{j_i = j^{sa} + s - j_{sa} + 1}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{j_{sa}=j_{sa}}^{(l_{sa}-l_{ik}+1)} \sum_{j_i=j_{sa}+s-j_{sa}+1}^{l_i-l_{ik}+1} \sum_{n_i=n+k}^n \sum_{n_{ik}=n+k-j_{ik}+1}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j_{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}
 \end{aligned}$$

GÜLDÜZYAN

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=j_{ik}-j^{sa})} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s) \cdot (j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s) \cdot (j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}-k_1+1)}^{( )}$$

GÜLDIYMA



$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{(\cdot)}{n_s=n_{sa}+j^{sa}-j_i}} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{l-1} \sum_{\binom{(\cdot)}{j_s=j_{ik}+l_s-l_{ik}}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa})!}$$

$$\frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{( )} \sum_{l \mid (j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}}^{(l_i + \dots - i l - s + 1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{sa}^{ik}-j_{sa}-j_{sa}^{lk})}^{( )} \dots - l_{sa}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{sa}^{ik}-j_{sa}-n_s)}^{( )} \dots$$

$$\sum_{(n_{sa}=n_{sa}^{ik}-j_{sa}-n_s)}^{( )} \sum_{(n_s=n_{sa}+j_{sa}-j_i)}^{( )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{lk} + 2 \cdot l_{k_1} - n_s) \cdot (j_s - j_i - s - l_k - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{lk} + 2 \cdot l_{k_1} - n_s) \cdot (j_i - n - l_k - l_{k_1} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}^a=j_{sa})}^{( )} \sum_{j_i=s}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{( )}$$

GÜLDÜZİN YA

$$\frac{\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (n-s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-l_i)!}}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz \stackrel{DOSD}{\Rightarrow} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i - l_j)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_i - k - s + 1} \sum_{(j_s=2)}^{l_i - k - s + 1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_i + j_{sa}^{ik} - i - s + 1}$$

$$\sum_{j_{ik} + l_{sa} - l_i = j_{sa} + l_i - l_{sa}}$$

$$\sum_{n_i = \dots}^n (n_{ik} = n + k - j_{ik} + 1)$$

$$n_{ik} + j_{sa} - k_1 (n_{sa} + j_{sa} - j_i - k_2)$$

$$\sum_{n_{sa} = \dots}^{n_{sa} + j_{sa} - 1} (n_s = n - j_i + 1)$$

$$(n_i - n_{ik} - k_1 - 1)!$$

$$(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!$$

$$(n_{ik} - n_{sa} - k_2 - 1)!$$

$$(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!$$

$$(n_{sa} - n_s - 1)!$$

$$(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)!$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n - j_s - j_s - s)!} \\
 & \frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(D - l_i)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l} \sum_{(j_s=1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i)} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!} \\
 & \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{sa}^{ik}}^{S_{DOS}} \left( \sum_{j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}} \sum_{j_{sa}^{ik}+1}^{(l_{sa}-1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{(n_{is}+1)} \sum_{n_i=n+k}^{(n_{is}+k-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \right)$$



$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{i-1} \binom{()}{j_s=1}$$

$$\sum_{j_s=1}^{i-1} \binom{()}{j_s=1} \sum_{j_{sa}=j_s}^{i-1} \binom{()}{j_{sa}=j_s}$$

$$\sum_{n_i=n}^n \binom{()}{n_i=n} \sum_{n_{ik}=n+k-j_{ik}+1}^{n} \binom{()}{n_{ik}=n+k-j_{ik}+1}$$

$$\sum_{k_2=j^{sa}+1}^{n_{ik}+j_{sa}-k_1} \binom{()}{k_2=j^{sa}+1} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-k_2)} \binom{()}{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \Bigg) +$$

$$\left( \sum_{k=1}^{i-1} \binom{()}{j_s=j_{ik}+l_s-l_{ik}} \sum_{j_s=1}^{i-1} \binom{()}{j_s=1} \right)$$

GÜLDÜZMÜNYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_i}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_2)} \sum_{(n-j_i+1)}^{n_{sa}+j_{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{sa}-n_{sa}-j_{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j_{sa}=j_{sa})}^{l_i-i^{l+1}} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}+1}
 \end{aligned}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - j_i - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \frac{(l_i + j - l_{sa} - s)!}{(l_{sa} + l_i - j - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{lk}+1}^{l_s+j_{sa}^{lk}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - \dots)}$$

$$\sum_{k=1}^{(\dots)} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=\dots} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\dots} \sum_{(n_{ik}=n_i - j_{ik} - \mathbb{k}_1 + 1)}$$

$$\sum_{n_{sa}=n_{ik}+\dots} \sum_{(j^{sa}=\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + \dots \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - \dots - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (n - s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_i \leq D + s - n \wedge$

$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + \dots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + \dots - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - \dots + 1 > \dots + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D \geq n < \dots \wedge \mathbb{k} = \mathbb{k} > 0 \wedge$

$\dots < j_i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} = \left( \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j_s+1)}^{(n_{ik}+j_{ik}-j^{sa})} \sum_{(n_s=n-j_i+1)}^{(n_{sa}-j_i)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{sa}+j_s-j_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{sa}-j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{()}{}} \sum_{l \binom{()}{j_s=1}}
 \end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{\binom{()}{j^{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}+1) \\ (n_{ik}=n+l_k-j_{ik}+1)}}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{\substack{(n_{sa}+j^{sa}-j_i-l_{k_2}) \\ (n_s=n-j_i+1)}}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - 1)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{i=1}^{i-l_s} \sum_{(j_s=2)}^{j_{sa}^{ik}+1} \right) \\
 & \sum_{i=1}^{i-l_s} \sum_{(j_s=2)}^{j_{sa}^{ik}+1} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜMNA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i)!}$$

$$\sum_{j_{ik}=0}^{l_{ik}-k+1} \sum_{j_{sa}^{ik}=k-1}^{l_{sa}-k+1} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \sum_{j_s=2}^{l_s-k+1}$$

$$\sum_{n_i=n+l_k}^{n+l_k+s+1} \sum_{n_{is}=n+l_k-j_s+1}^{n+l_k+s+1} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

GÜLDENWA



$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i - l_s} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik} - i^{l+1}}$$

$$\sum_{n_i=0}^n (n_{ik} = n + k - j_{ik} + 1)$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜZÜMÜYA

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-l_{k1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{()} \sum_{(n_s=n_{sa}+j^{sa})}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

$$\frac{1}{(l_s + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{()} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k1}+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}$$

GÜLDÜNYA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z^S}^{D_0} \Rightarrow j_s, j_{sa}, j_i = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} (j_s - k - 1) \cdot (l_{sa} - k - s + 1) \sum_{j_{sa}^{ik}+1}^{j_{sa} - j_{sa}^{ik}} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_{sa} - j_{sa}^{ik}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{sa})!} \cdot \\
 & \frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{l-1} \frac{(l_s - k + 1)!}{(j_s - 2)!} \cdot \\
 & \sum_{j_{ik}=0}^{l_{ik}-k+1} \sum_{j_{sa}^{ik}=0}^{(l_i + j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i=j_{sa} + l_i - l_{sa}}^{(n - j_s + 1)} \sum_{n_{is}=n+k}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{is}+j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDENMYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i} \sum_{j_s=1}^{(n-k)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{j_i=0}^{l_i+j_{sa}^{ik}-j_s+1} \sum_{j_{sa}=0}^{j_{sa}^{ik}-j_i-l_{sa}}$$

$$\sum_{n_i=n-k}^n \sum_{n_{ik}=n+k-j_{ik}+1}^{n-k+1}$$

$$\sum_{k_2=j_{sa}^{ik}-j_i+1}^{n_{ik}+j_{sa}^{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{sa}+j_{sa}^{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

GÜLDÜŞMÜŞA

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} n_{ik}=n_{is}+j_{ik}-l_{k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{()} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!}$$

$$\frac{1}{(l_s + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}$$

GÜLDÜNYA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^{DOSB} = \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{l-1} (l_{ik}-k-j_{sa}^{ik}+2)$$

$$\sum_{j_{ik}=i+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{j_i} \sum_{l=0}^{j_i - k} \sum_{m=0}^{j_i - k - l} \sum_{n_{ik}=0}^{n - n_{ik} - j_{ik} + 1} \sum_{n_{sa}=0}^{n_{sa} + j^{sa} - j_i - k_2} \sum_{n_s=0}^{n - j_i + 1} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜMBA



$$\begin{aligned}
 & \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(n)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(n_i-j_s+1)} \sum_{j_i=j_{sa}+l_i-} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{(n_i-j_s+1)} \sum_{j_{ik}=l_{k_1}}^{(n_i-j_s+1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n)} \sum_{n_s=n_{sa}+j_{sa}^{ik}} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n_{sa} + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=l}^{(n)} \sum_{(j_s=1)}^{(n)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(n)} \sum_{(j_{sa}=j_{sa})}^{(n)} \sum_{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{(n)} \\
 & \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-l_{k_2}}^{(n)} \sum_{(n_s=n_{sa}+j_{sa}^{ik}-j_i)}^{(n)} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)! \cdot (n - s)!}
 \end{aligned}$$

GÜLDÜZYA

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{\Rightarrow j_s, j_{ik}, j_{sa}}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{j_s=2}^{l_{ik}-k-j_{sa}^{ik}+2} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{j_{sa}-k+1} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \right)$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{(j_s)} l_i^{(j_s)} \cdot \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(n_i - l_i + 1)} \sum_{j_i=j^{sa} + s - j_{sa}}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{ik}=n+l_k}^n \sum_{(n_{ik}=n+l_k - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa}=n+l_k - j^{sa} - l_{k1}}^{(n_{ik} - j^{sa} - l_{k1})} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - l_{k2})} \\
 & \frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) +
 \end{aligned}$$

GÜLDÜNYA

$$\begin{aligned}
 & \left( \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \right) \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+s-j_s}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}^{ik})! \cdot (n_{sa}-j_{sa}^{ik})!}{(n_{sa}-n_s+1)! \cdot (n_s-n-j_i)!} \\
 & \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{is}+j_s-j_{ik}-n_{sa}-j_{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(n_{sa}-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}+1} \binom{l_{sa}-i+l+1}{l_i-i+l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})} \binom{n_i-j_{ik}+1}{n_{sa}+j_{ik}-j^{sa}-l_{k_1}} \binom{n_{sa}+j^{sa}-j_i-l_{k_2}}{n_{sa}=n+l_{k_2}-j^{sa}+1} \binom{n_s-j_i+1}{(n_s-j_i+1)} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}-1)!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j^{sa}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_s-n_s-1)!}{(j_i-j_i-1)! \cdot (n_s+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(n_i+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_i+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) -
 \end{aligned}$$

$$\sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1})}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - \dots)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \dots)!}{(D + j_i - \dots - l_i)! \cdot (\mathbf{n} - \dots)!}$$

$$\sum_{j_s=1}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\cdot)} \sum_{j_i=s}^{(\cdot)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D > n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fzS_{\Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2, \dots, i-k+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j_{sa}=j_{ik}+j_{sa})}^{(n_i-j_s)} \sum_{(j_i=j_{sa}+j_i-l_{sa})}^{(n_{is}+j_s-j_{ik})} \sum_{n_i=n+1}^n \sum_{(j_s+1)}^{(n_i-j_s)} \sum_{(n_{is}+k_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik})} \sum_{(n_{sa}=n_{sa}+1)}^{(n_{sa}+j_{ik}-j_{sa}-j_i)} \sum_{(n_s=n-j_i+1)}^{(n_{sa}-j_{sa}-1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i+j_{sa}-i-1)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+l_i}$$

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n-i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}+j_{ik}-j^{sa}-k_1)} \sum_{(n_{sa}=n+k_2-j^{sa})} \sum_{(n_s=n-j_i+1)} \frac{(n_i-j_{ik}+1)!}{(n_i-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n-i-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}}{(n_i-j_{ik}+1)! \cdot (n_{sa}+j_{ik}-n-i-j^{sa}-k_2)! \cdot (n_{sa}-n_s-1)! \cdot (j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)! \cdot (n_s+j_i-n-1)! \cdot (n-j_i)! \cdot (l_{sa}+j_{sa}^{ik}-j^{sa}-l_{ik})! \cdot (j^{sa}-j_{sa})! \cdot (D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{i-1} (l_s-k+1)$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i - 1)!}{(D + j_i - 1 - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$\sum_{(j_s=1)}^{()}$$

$$\sum_{(j_{ik}=j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa})} \sum_{(j_i=s)}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k})}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{()}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_s^i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq \mathbf{n} < \mathbf{n} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{\Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{i-1} \sum_{(j_s=2, \dots, l_s-k+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_{sa}=j_{ik}+l_{sa})}^{( )} \sum_{(j_i=j_{sa}^{ik}-l_{sa})}^{( )}$$

$$\sum_{n_i=n+l_{sa}^{ik}-k-s+1}^n \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{is}=n+l_{sa}^{ik}-k-s+1)}^{(n_{is}=n+l_{sa}^{ik}-k-s+1)} \sum_{(n_{is}+1)}^{(n_{is}+1)} \sum_{(n_{is}+l_{sa}^{ik}-j_{ik}+1)}^{(n_{is}+l_{sa}^{ik}-j_{ik}+1)}$$

$$\sum_{(n_{sa}=n+l_{sa}^{ik}-k-s+1)}^{(n_{sa}=n+l_{sa}^{ik}-k-s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{( )} \sum_{j_s=1}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(j^{sa}-k_2)}$$

$$\frac{(n_i - j_{ik} - 1)!}{(j_i - 2)! \cdot (n_{ik} - k_1 + 1)!}$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - a - j^{sa} - k_2)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{j_s=2}^{( )}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{( )}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(\mathbf{n} + j_{sa}^s - j_s - \dots)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - \dots)!}{(D + j_i - \dots - l_i)! \cdot (\mathbf{n} - \dots)!}$$

$$\sum_{j_s=1}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!}$$

$$\frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - s)!}$$

$$D > n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{DOSD} j_{ik} j_{sa} j_i = \left( \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})}^{(j_{sa}-j_{sa})} \sum_{(j_{sa}-j_{sa})}^{(j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})}$$

$$\sum_{(n_{ik}+k_2-j_{ik}+1)}^{(n_{ik}+k_2-j_{ik}+1)} \sum_{(n_{sa}-j_{sa}-k_2)}^{(n_{sa}-j_{sa}-k_2)}$$

$$\sum_{(n_{sa}-n_s+1)}^{(n_{sa}-n_s+1)} \sum_{n_s=n-j_i+1}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=1}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n-i^{l+1})}^{(n_i-j_{ik}+1)}$$

$$n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1 \sum_{(n_{is}=n-\mathbb{k}_2)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - \mathbb{k}_1 - 1)!}{(j_i - 2)! \cdot (n_{ik} - j_i + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left( \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{l_i-k+1} \sum_{j_i=j^{sa}+s-j_{sa}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_s+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n-j_i-1)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}-l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{( )} \sum_{l=1}^{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(l_{sa}-i^{l+1})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_s - s)!}{(j^{sa} + l_i - j_{sa} - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=n_s+l_{ik}-l_s}^{( )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{( )} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{( )} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-l_{k_1}+1)}^{( )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}} \sum_{(n_s=n_{sa}+j^{sa})}^{( )}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - s - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_{ik} - j_{ik} - l_{k_1} - s)! \cdot (n - s)!} \cdot \frac{(D - l_i)!}{(D + s - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \leq j_{sa}^{ik} - 1 \leq j_s \leq j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_{sa} \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$$

$$D \geq n < n - l = l_{k_1} \wedge$$

$$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$s: \{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_1}, j_{sa}, \dots, j_{sa}\} \wedge$$

$$s > 5 \wedge s = l_{k_1} + l_{k_2} \wedge$$

$$l_{k_2}: l_{k_2} \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right)$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_s - j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{l \binom{D}{j_s=1}}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{\binom{D}{j_s=1}} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{n_s=n-j_i+1}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - 1)!}{(n - l_i) \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{k=1}^{l_i - k + 1} \sum_{(j_s=2)}^{l_i - k + 1} \right) \\
 & \sum_{j_{ik}^{ik} + j_{sa}^{ik} - 1}^{l_i - k + 1} \sum_{j_i = j_{sa} + s - j_{sa} + 1}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i=1}^{(n)} \sum_{j_s=1}^{(n)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i_{l+1}} \sum_{j_{sa}=j_{sa}^{sa}-l_{sa}-l_{ik}}^{(n)} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}+1}^{l_i-i_{l+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_i)} \sum_{(j_i=j_{sa}-j_{sa})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa})} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s) \cdot (j_s - j_i - s - l_{k_1} - l_{k_1})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s) \cdot (j_i - n - l_{k_1} - l_{k_1} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i}^{\binom{)}{l}} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{\binom{)}{l}}$$

GÜLDİMYA

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{\binom{(\cdot)}{n_s=n_{sa}+j^{sa}-j_i}} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - \mathbf{n} - \mathbb{k} - \mathbb{k} - j_{sa}^s)! \cdot (\mathbf{n} - s)!} \cdot \frac{(D - l_i)!}{(D + s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - l_i)!}$$

$$D \geq n < n \wedge l_i \leq D + s - \mathbf{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \mathbf{n} \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$fz \stackrel{DOSD}{\Rightarrow} j_s, j_{ik}, j_{sa}, j_i = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\mathbf{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - j^{sa} - 1)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - 1)! \cdot (j_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l=j_s=1}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{i-l+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{(l_i+j_{sa}-i-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s - 2)}$$

$$\sum_{j_{ik}=j_s+j_s-1}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_{is}+lk}^n (n_{is}=n+j_s+1) \sum_{n_{ik}=n_{is}+j_s-j_{ik}-lk_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-lk_2)} \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot lk_1 - n_s - j_s - j_i - s - lk - lk)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot lk_1 - n_s - j_i - n - lk - lk - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}=j_{sa})}^{( )} \sum_{j_i=s}$$

GÜLDÜMBA



$$\frac{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\cdot)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s) \cdot (n - s)!} \frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_i \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa}$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k}$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$$

$$f_z^{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}{(n_{sa}=n-j^{sa}+1) n_s=n-j_i+1}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(j^{sa} + j_{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{j^{sa} + l_{ik} - l_i - j_{sa}^{ik} + 1} \binom{(\quad)}{(j_s = j_{ik} + l_s - l_{ik})} \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{-k+1} \sum_{(j^{sa} = j_i + l_{sa} - l_i)} \binom{(\quad)}{l_i - k + 1} \sum_{j_i = l_{ik} + s - k - j_{sa}^{ik} + 2}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} + \\
 & \sum_{k=D+l_{ik}+1}^{i^{l-1}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{( )} \sum_{j_i=l_i+n-D}^{l_s-l_{ik}} \sum_{n_i=n+l_k}^{(n_{is}+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) n_{sa}+j^{sa}-j_i}{(n_{sa}=n-j^{sa}+1) n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \binom{( )}{j_s=1}$$

$$\sum_{j_{ik}=j_{sa}^{ik} (j^{sa}=j_i+l_{sa}-l_i)}^{( )} \binom{( )}{j_s=1} \binom{( )}{j_s=1} \binom{( )}{j_s=1}$$

$$\sum_{n_{ik}=j_{ik}+j_{sa}^{ik}-l_{sa}-l_{ik}}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=j_{ik}+j_{sa}^{ik}-l_{sa}-l_{ik}}^{(n_{ik}-l_{ik}-j_{ik}+1)} \sum_{n_{sa}=l_{sa}-l_{ik}-j_{sa}^{ik}}^{(n_{sa}+j_{sa}^{ik}-j_i-l_{sa})} \sum_{n_s=n-j_i+1}^{(n_s-n-j_i+1)}$$

$$\frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1}$$

$$\sum_{(n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(2 \cdot n_{s_a} + 2 \cdot j^{s_a} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k}_1)!}{(2 \cdot n_{s_a} + 2 \cdot j^{s_a} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k})! \cdot (\mathbb{k} - j_{s_a})!}$$

$$\frac{(j_{s_a}^s - s)!}{(j_{s_a}^s - s)!}$$

$$\frac{(l_s - j_s - \mathbb{k} - 1)!}{(l_s - j_s - \mathbb{k} - 1)!}$$

$$\frac{(j_s - \mathbb{k} - 1)!}{(j_s - \mathbb{k} - 1)!}$$

$$\frac{(D - n)!}{(D - n)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{i_k} - j_{s_a}^{i_k} + 1 \wedge j_s + j_{s_a}^{i_k} - 1 \leq j_{i_k} < j^{s_a} + j_{s_a}^{i_k} - 1 \wedge$$

$$j^{s_a} = j_i + j_{s_a} - s \wedge j^{s_a} + s - j_i \leq n \wedge$$

$$l_{i_k} - j_{s_a}^{i_k} + 1 = l_s \wedge l_{s_a} + j_{s_a} - j_s > l_{i_k} \wedge j_{s_a} - s > l_{s_a} \wedge$$

$$D + s - n < l_i \leq D + l_{s_a} + s - j_{s_a} \wedge$$

$$D \geq n \wedge l = \mathbb{k} - 0 \wedge$$

$$j_{s_a}^s \leq j_{s_a}^i - 1 \wedge j_{s_a}^{i_k} < j_{s_a} - 1 \wedge j_{s_a}^s < j_{s_a}^{i_k} - 1 \wedge$$

$$s: \{j_{s_a}^i, \dots, \mathbb{k}_1, j_{s_a}^{i_k}, \dots, j_{s_a}, \dots, j_{s_a}\} \wedge$$

$$j_{s_a}^i > 5 \wedge j_{s_a}^i + s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{i_k}, j^{s_a}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{i_k}+s-n-l_i-j_{s_a}^{i_k}+1} \sum_{(j_s=j_{i_k}+l_s-l_{i_k})}^{(\ )} \right)$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{j^{s_a}+j_{s_a}^{i_k}-j_{s_a}} \sum_{(j^{s_a}=j_i+j_{s_a}-s)}^{(\ )} \sum_{j_i=l_i+n-D}^{l_{i_k}+s-k-j_{s_a}^{i_k}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

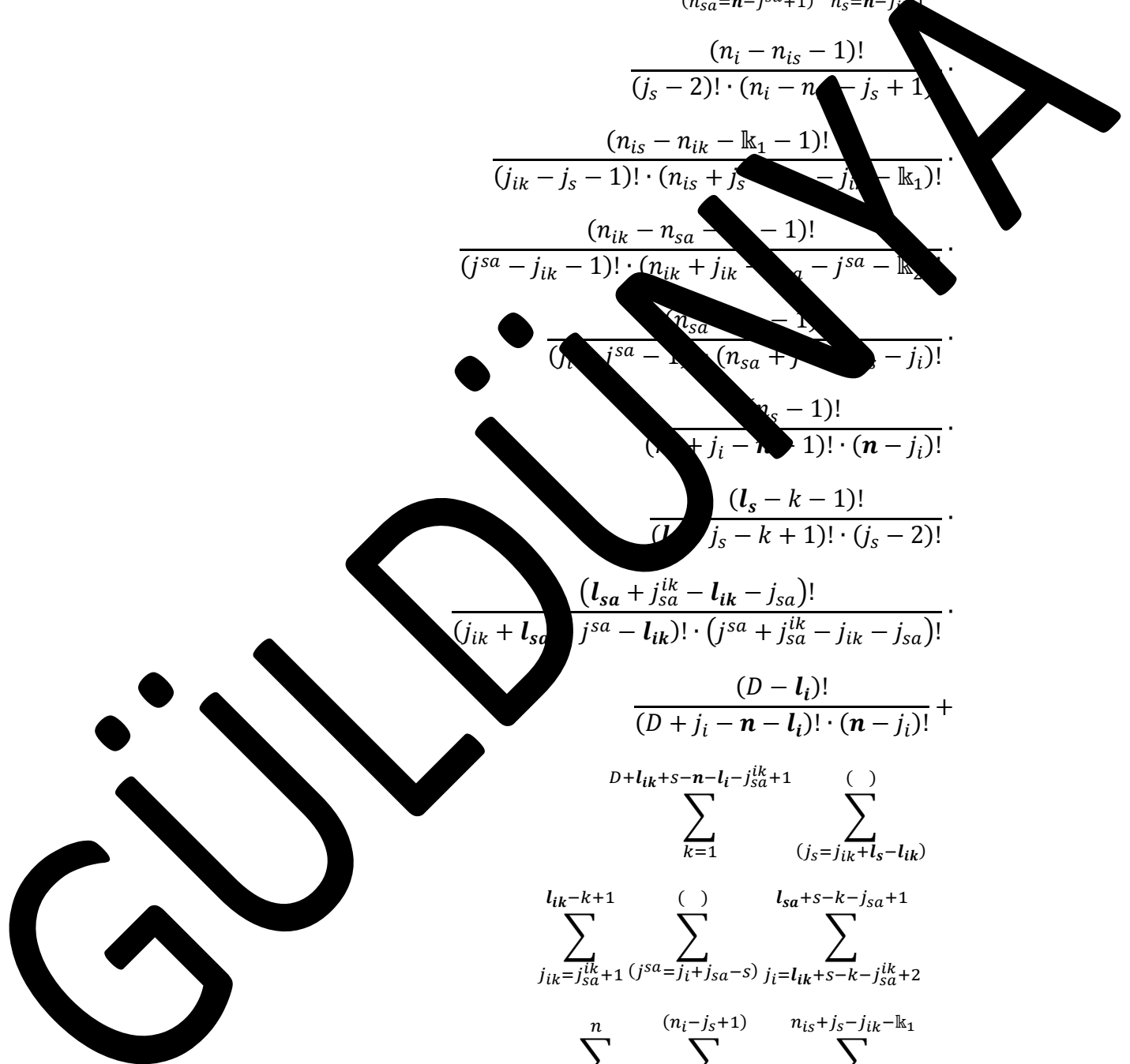
$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{l_{sa}+s-l_i-j_{sa}+1} \binom{()}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \binom{()}{j^{sa}=j_i+j_{sa}-s} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{\binom{D + j_i - n - l_i}{(D + j_i - n - l_i)! \cdot (n - j_i)!}}{\binom{D + l_i + s - n - l_i - j_{sa}}{\sum_{k=1}^{j_{sa} + j_{sa}^{ik} - l_{ik}} (j_i + j_{sa}^{ik} - 1) l_{ik} + s - k - j_{sa}^{ik} + 1}} + \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{sa} + j_{sa}^{ik} - l_{ik}} \sum_{(j_i - j_{sa}^{ik} + n - D)} \sum_{j_i = l_i + n - D}^{(n - j_s + 1)} \sum_{n_i = n + k}^{(n - j_s + 1)} \sum_{(n_{is} = n + k - j_s + 1)}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_{sa} = n - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = n - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}{j_s=j_{ik}+s-l_{ik}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \binom{j_i+j_{sa}-1}{j_{ik}+s-k-j_{sa}^{ik}+2} \sum_{j_s=j_{ik}+s-l_{ik}}^{l_{sa}+s-j_{ik}+1}$$

$$\sum_{n_i=n+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}^n \sum_{n_{is}=n+l_{ik}-j_{sa}^{ik}+1}^{n-j_{sa}^{ik}+1} \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{j_{ik}-l_{k_1}}$$

$$\sum_{j_{sa}=n-j_{sa}^{ik}+1}^{n+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{ik}-j_{sa}^{ik}-l_{k_2}} n_{sa}+j_{sa}-j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!}$$

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$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}-k-j_{sa}+2}^{l_i-k+1} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k+1}^{n_{is}+j_{ik}-k_1} \\
& \sum_{(n_{sa}=n+k)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}-k_2} \\
& \frac{(n_{is}-k_1-1)!}{(j_{ik}-k_1-1)! \cdot (n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{sa}^{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
& \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
& \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
& \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{\sum_{j_s=j_{ik}+l_s-l_{ik}}} \\
 & \sum_{j_{ik}=j_{sa}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-k_1) \cdot n_{sa}+j_{sa}-j_i}{(n_{sa}=n-k_2+1) \cdot n_s=n-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{\sum_{j_s=j_{ik}+l_s-l_{ik}}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}} \\
 & \sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{\substack{( ) \\ (j_s=1)}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{\substack{(l_{sa}-i^{l+1}) \\ (j^{sa}=l_{sa}+n-D)}} \sum_{\substack{l_i-i^{l+1} \\ j_i=l_i+n-D}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - j^{sa} - l_{k_1} - j_{sa})!}{(l_{sa} + j_{sa} - j^{sa} - l_{k_1} - j_{sa})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (l_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{( )} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_{k_2})}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_k - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_i - n - l_k - l_k - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!}
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}}^{S^{DOSD}} = \sum_{k=1}^{n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{lk} - j_{sa}^{lk} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{(j_i=l_s+s-k+1)}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i-1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(i)} \sum_{j_{ik}=l_i+n-D}^{(i)} \sum_{j_{sa}=j_i+l_s+l_{ik}}^{(i)} \sum_{j_i=l_i+n-D}^{(i)} \sum_{n_i=n+l_{ik}}^{(i)} \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{(i)} \sum_{n_{sa}=n-j_{sa}+1}^{(i)} \sum_{n_s=n-j_i+1}^{(i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{l_i-i}^{l_i-i}$$

$$\sum_{n_{ik}+k}^{(n_{ik}=n+k-1)}$$

$$\sum_{n_{sa}=j_{sa}-j^{sa}+1}^{(n_{sa}+j_{sa}-j_i-k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_i-l_{sa})} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k - 1)!}$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_s = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^i > 5 \wedge j_{sa}^i + s + k \wedge$$

$$k_2: z_2 \geq 2 \wedge k_2 \leq k_1 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{DOSD}(j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{()} \sum_{j_i=l_i+n-D}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\binom{()}{j^{sa}=j_i+l_{sa}-l_i}} \sum_{j_i=l_s+s-k+1}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{j_s=2}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_s}^{(l_i-1)} \sum_{j_{sa}=j_i+l_{sa}-l_i}^{(l_i-1)} \sum_{j_i=l_i+n-D}^{l_i-i-1} \sum_{j_s=1}^{(j_s-1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
& \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa})} \binom{D+l_s+s-n-l_i}{j_{sa}^{ik}} \sum_{(j_{sa}^{ik}=j_i+l_{sa}-l_i)}^{(j_{sa}^{ik}=j_i+l_{sa}-l_i)} \sum_{j_i=l_i+n}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-k_2)} \sum_{n_s=n_{sa}+j_s} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} \wedge j^{sa} + j_{sa}^{ik} - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_i + s - n - j_{sa} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \right. \\
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_i+n}^{l_s+s-k} \\
\sum_{n_i=n+k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+k-j_s+1)} \sum_{n_{ik}=n}^{n_{is}+j_s-j_{ik}-k_1} \binom{(\quad)}{(n_{ik}+j_{ik}-j_i)} \sum_{n_{sa}=n}^{n_{sa}-j_i} \binom{(\quad)}{(n_{sa}=n-j_i+1)} \binom{(n_s-n_j)}{(n_s-n_j)} \\
\frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \cdot \frac{(n_{ik}-k_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \\
\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
\left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \right. \\
\left. \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(\quad)}{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=l_s+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \right)$$

GÜLDENWA



$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{j^{sa}=j_i+j_{sa}-s}^{( )} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDÜZYAZ

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_s - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(j_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_s - l_i - j_{sa}^{ik} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{\quad}{\quad} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_s = l_{sa} + n - D)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = l_i + n - D}^{l_s + s - k} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=l_{sa}-s-1)}^{(j_i=l_{sa}-s-1)} \sum_{(j_i=l_s+s-k-j_{sa}+1)}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s-k}^{n-l_i-j_s+1} \frac{(l_s + j_{sa}^{ik} - k - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik} - k + 1)!} \cdot \\
 & \sum_{j_{ik}=j_{sa}^{ik} - (j^{sa} = l_{sa} - D)}^{n-l_i-j_s+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2}^{n-l_i-j_s+1} \frac{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)!}{(n_{is} - n_{ik} - \mathbb{k}_1 - j_s + 1)!} \cdot \\
 & \sum_{n_{is}=\mathbb{k}_1}^n \sum_{n_{ik}=\mathbb{k}_2 - j_{ik} + 1}^{n-l_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDENYA

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{D+l_{sa}+s-n-l_i-j_{sa}+1}{k} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{j_s=j_{ik}+l_s-l_{ik}} \binom{D+l_{sa}+s-n-l_i-j_{sa}+1}{j_s}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}-k} \binom{l_s+j_{sa}-k}{j_{ik}} \sum_{j^{sa}=l_{sa}+n-D+l_i+l_{ik}+j_{sa}-j_{ik}}^{(j_i+j_{sa}-s-1)} \binom{j_i+j_{sa}-s-1}{j^{sa}} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{l_{sa}+j_s-j_{ik}} \binom{l_{sa}+j_s-j_{ik}}{j_s}$$

$$\sum_{n_i=n+l_{ik}}^n \binom{n}{n_i} \sum_{n_{is}=n_i+l_{is}-l_{ik}}^{(n_i-j_s+l_{is}-l_{ik})} \binom{n_i-j_s+l_{is}-l_{ik}}{n_{is}} \sum_{n_{ik}=n_i+l_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \binom{n_{is}+j_s-j_{ik}}{n_{ik}}$$

$$\binom{(n_i-j_s+l_{is}-l_{ik})}{n_{is}} \binom{(n_{is}+j_s-j_{ik})}{n_{ik}} \binom{(j_i+j_{sa}-s-1)}{j^{sa}} \binom{l_{sa}+j_s-j_{ik}}{j_s} \binom{(n_{sa}-n_s-1)}{n_s}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜŞMÜŞA

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{j_s=j_{ik}+l_s-l_{ik}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_{sa}+s-k-j_{sa}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j_s-1)! \cdot (n_{sa}+j_{sa}-j_i-1)!}{(n_{sa}=n+l_k+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{sa}+j_{sa}-j_i+1)!} \\
 & \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \binom{(\quad)}{j_s=j_{ik}+l_s-l_{ik}}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-i^{l+1}} \sum_{j_i=l_i+n-D}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{( )} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{( )} \sum_{j_i = l_i + n - D}^{l_s + s - k} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

GÜLDEN



$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$$

$$f_{j_s, j_{ik}, j^{sa}, j_i}^{SD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{(j_i=l_i+n-D)}^{l_s+s-k} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \right) \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_s - l_s - j_{sa} + 1)! \cdot (j_{ik} - j_s - j_{sa} + 1)!} \cdot \\
 & \frac{(D - l_s - j_s - k + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_i-j_s-n-l_i} \sum_{j_s=2}^{l_s-k+1} \binom{l_{ik}+s-k-j_{sa}^{ik}+1}{j_{ik}=n+l_{ik}-l_{sa} \quad (j^{sa}=j_i+j_{sa}-s) \quad j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_s+s}^{D+l_s+s} \sum_{j_s=n-l_i+1}^{j_s=n-l_i+1} \sum_{j_i=1}^{j_i=1} \sum_{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} + j_{sa} - s)}^{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} + j_{sa} - s)} \sum_{j_i=1}^{j_i=1} \sum_{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} + j_{sa} - s)}^{j_{ik}=j_{sa}^{ik} - l_{sa} (j_{sa}^{ik} + j_{sa} - s)} \\
 & \sum_{n_i=n+k}^n \sum_{n_{is}=n-k-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+ \\
 & \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(j_i+j_{sa}-s-1)} \sum_{(l_i+n-D)}^{l_s+s-1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_s+1)}^{(n_{is}+j_s-k-k_1)} \\
 & \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_{sa}+j_{sa}-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right)^+
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(j_i+j_{sa}-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_{ik}+s-k-j_{sa}^{ik}+1} \sum_{j_i=l_s+s-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
 & \sum_{(n_{sa}=n_{sa}^{ik}+1)}^{(n_{ik}+j_{ik}-n_{sa}^{ik})} \sum_{n_s=n-j_i}^{n_{sa}^{sa}-j_i} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - l_{k2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{\substack{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1) \\ (j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}} \sum_{l_i-k+1}^{j_i=l_{ik}+s-k-j_{sa}^{ik}+2} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_s}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}-j_{ik}-k_2} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1}
 \end{aligned}$$

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$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-k+1} \sum_{j_i=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDENKAYA



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_s - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{l=j_s=1}^{\binom{D}{i}} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{l_i=l+1}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s + s - n - l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa} = j_i + j_{sa} - s)} \sum_{j_i = l_i + n - D}^{l_s + s - k} \\
 & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j_{sa}+j_{sa}^{ik}} \sum_{l_i=l_{ik}+n-D}^{l_s+s-k} \sum_{j_i=l_i+n-D}^{n-(j_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-n-l_i} \sum_{j_s=0}^{n-j_s-k+1} \sum_{j_{ik}=l_{ik}-D}^{j_{sa}+j_{sa}^{ik}-j_{ik}-l_i} \sum_{j_{sa}=0}^{n_{is}-k-j_{sa}^{ik}+1} \sum_{i=n+l_k}^n \sum_{n_{is}=n_{is}-j_s+1}^{n_{is}-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j_{sa}+1}^{l_k+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i}^{l_i-k+1} \sum_{j_{sa}^{ik}+2}^{l_{sa}^{ik}+2} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \\
 & \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-l_{k_2}+1)}^{(n_{sa}=n-l_{k_2}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜŞÜNME

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_i+n}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-k_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}=n-k_2-j_{ik}+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \binom{()}{j_{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_i+n-D}^{l_i-i+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-k_1} \sum_{(n_s=j_i+1)}^{(n_{sa}+j_{sa}-j_i-k_1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{j_s=j_{ik}-j_{sa}^{ik}+1} \\
 & \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}} \binom{()}{j_{sa}=j_i+l_{sa}-l_i} \sum_{j_i=l_i+n-D}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s - j_{sa} \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$

$s \leq 5 \wedge s = s - k \wedge$

$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$



$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_i - k + 1)! \cdot (n - j_i - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{n - 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_i = j_{sa}^{ik} + 1}^{n - k + 1} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{(i + j_{sa} - k - s + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{( )} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{j_i} \sum_{l=0}^{j_i - k} \binom{j_i - k - l}{k} \binom{j_i - k - l}{l} \\
 & \sum_{j_{ik}=j_s}^{j_i} \sum_{j_{sa}=l_i+n_{ik}-D-s}^{j_i - D - s} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_i} \\
 & \sum_{n_{ik}=n+k}^n \sum_{n_{sa}=n+k_2-j^{sa}+1}^{(n_i - j_{ik} + 1)} \sum_{n_{ik}=n+k-j_{ik}+1}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{(n_i - j_{ik} + 1)} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - k_2)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-1}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j_s^s}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_{is} - j_i - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_{is} - j_i - k - k - j_{sa}^s)!} \cdot \frac{1}{(j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_{sa} + s - n - j_{sa} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik_1}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{l_{ik}+j_{sa}-k-j_{sa}^{ik}+1}{\quad} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{\quad}{\quad}$$

$$\sum_{n_i=n+k}^n \binom{n_i-j_s+1}{(n_i=n+k-j_s+1)} \sum_{n_{ik}=n-k_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \binom{\quad}{\quad}$$

$$\binom{(n_{ik}+j_{ik}-j_{sa})}{(n_{sa}=n-k_1+1)} \binom{(n_{sa}-j^{sa}-j_i)}{n_s=n-j_i} \frac{(n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \cdot$$

$$\frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{ik}-j_{sa}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \binom{l_{sa}-k+1}{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{\quad}{\quad}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!}$$

$$\frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a} - l_{k_2})!}$$

$$\frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{s_a} + j_{s_a}^{i_k} - l_{i_k} - j_{s_a})!}{(j_{i_k} + l_{s_a} - j^{s_a} - l_{i_k})! \cdot (j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{i_k}+s-n-l_i-j_{s_a}+1}^{D+l_{s_a}+s-n-l_i-j_{s_a}+1} \sum_{j_s=j_{i_k}+l_s-l_{i_k}}^{( )}$$

$$\sum_{j_{i_k}=j_{s_a}^{i_k}+1}^{l_{i_k}-k+1} \sum_{j^{s_a}=l_i+n+j_{s_a}-D-s}^{(l_{s_a}-k+1)} \sum_{j_i=j^{s_a}+s-j_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{i_s}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_k-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{n_{s_a}=n-j^{s_a}+1}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_{sa} - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{(\quad)}{\quad} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{sa + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_i=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}-j_{sa}} \sum_{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(l_{ik}+j_{sa}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENSA



$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s}^{n-l_i-j_s} \sum_{j_i=j_s}^{n-l_i-j_s} \sum_{j_{sa}=j_i}^{n-l_i-j_s} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{ik}-k+1} \sum_{j_{sa}^{ik}=j_{sa}+1}^{l_{ik}-k+1} \sum_{n_{is}=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{n-l_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j^{sa}+1}^{l_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j^{sa}=l_{sa}+1}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=n-D}^{l_i-k+1} \\
& \sum_{n_i=n+l_{ik}+1}^n \sum_{n_i=n+l_{ik}+1}^{(n_i-j_s)} \sum_{n_i=n+l_{ik}+1}^{n_i+j_s-j_{ik}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{\quad} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j_i=j_{sa}^{sa}+s-j_{sa}^{ik}}^{(l_{sa}-k+1)} \sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n+l_{ik}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{ik}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-l_{k_1}-1)! \cdot (n_{sa}-j_{sa}-j_i)}{(n_{sa}-l_{sa}+1)! \cdot (n_s-n-j_i)} \cdot \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{ik}-j_s+1)!} \\
 & \frac{(n_{ik}-n_{is}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \binom{(\quad)}{\quad} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(\quad)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_2}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(l_{sa} + l_{ik} - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}
 \end{aligned}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

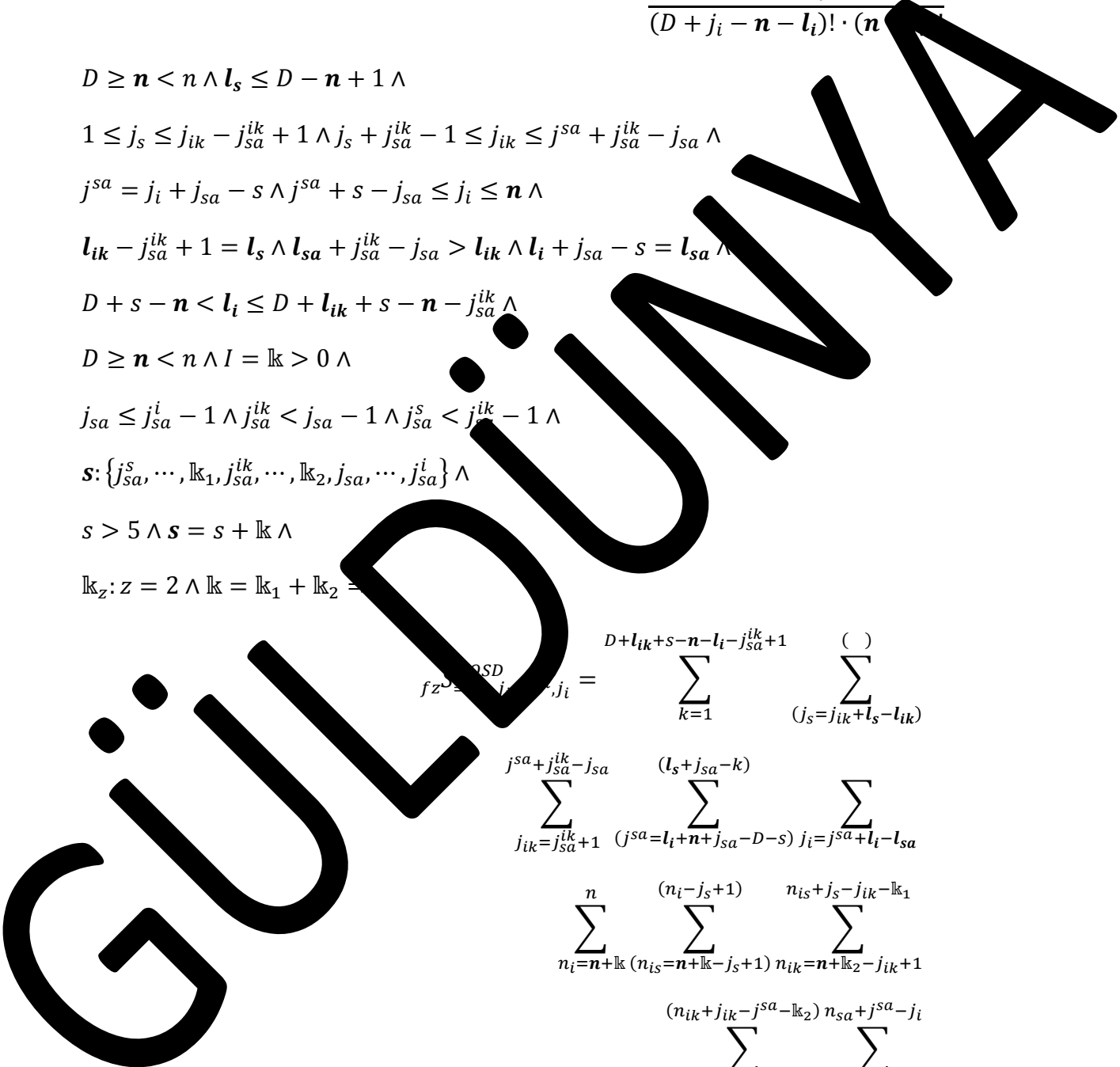
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$fz^s = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \frac{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2) n_{sa}+j^{sa}-j_i}{\sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1}} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s = j_{ik} + l_s - l_{ik}}^{D + l_{ik} - n - l_i - j_{sa}^{ik}} \binom{D - l_{ik}}{j_s} \cdot \\
 & \sum_{k = j_{sa}^{ik} + 1}^{l_s + j_{sa}^{ik} - k} \sum_{(j^{sa} = l_s + j_{sa} - k + 1)}^{(l_i + j_{sa} - k - s + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{n} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i^{l-1}} \sum_{j_s=j_{ik}+l_s-1}^{j_s=j_{ik}+l_s-1} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_i=j^{sa}+l_i-l_{sa}} \sum_{j_{ik}=j_{sa}^{ik}}^{j_{ik}=j_{sa}^{ik}-k} \sum_{j_{sa}=l_i+n_{is}-D-s}^{j_{sa}=l_i+n_{is}-D-s} \sum_{n_{is}=n_{is}-j_s+1}^{n_{is}=n_{is}-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{ik}=n+l_{k_2}-j_{ik}+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜNYA



$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \binom{( )}{j_s = k}$$

$$\sum_{j_{ik} = j_{sa}^{ik}}^{(l_i + j_{sa} - i^{l-s+1})} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)} \sum_{j_i = j_{sa}^{ik} - l_{sa}}$$

$$\sum_{n_i = j_{ik} - j_{ik} + 1}^{(n_i - j_{ik} + 1)} \sum_{(n_i - j_{ik} + 1)}$$

$$\sum_{n_{sa} = j_{ik} - j_{sa} + 1}^{(n_{sa} + j_{sa} - j_i - k_2)} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = l_i + n + j_{sa} - D - s)}^{(l_s + j_{sa} - k)} \sum_{j_i = j_{sa}^{ik} - l_{sa}}$$

GÜLDÜMBA

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k - 1)!}$$

$$\frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(l_s - j_s - 1)! \cdot (j_s - 1)!}$$

$$\frac{(D - 1)!}{(D - 1)!}$$

$$\frac{(D - j_i - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - 1 \wedge$$

$$D \geq n \wedge l = k - 1 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{1, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^i, \dots, j_{sa}^s\} \wedge$$

$$s > 5 \wedge j_{sa}^i = s + k \wedge$$

$$k_2: z = 2 \wedge k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{DOSD} (j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j^{sa} - l_{k_2} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{j_s=2}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
\end{aligned}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_{ik}=j_i}^{(l_i+j_{sa}-j_{ik}+1)} \sum_{(j^{sa}=l_i)}^{(j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_i)} \sum_{(j_s=1)}^{(j_s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j_{sa}=l_i+n+j_{sa}-D-s)}^{(n_i-j_s+1)} \sum_{j_i=l_{sa}+l_i-l_{sa}}^{(n)} \sum_{(n_{is}=n+l_{ik}-1)}^{(n_{sa}=n+l_{ik}-j_{sa}^{sa}-j_i)} \sum_{(n_{ik}=n_{is}+j_{sa}^{sa}-l_{k_1})}^{(n_{sa}=n+l_{ik}-j_{sa}^{sa}-j_i)} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{sa} + 2 \cdot l_{k_1} - n_s - j_i - s - l_{k_1} - l_{k_2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{sa} + 2 \cdot l_{k_1} - j_i - s - l_{k_1} - l_{k_2} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_i < D - n - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{sa} = j_i + j_{sa} - s \wedge j_{sa}^{sa} - s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = j_{sa}^{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$

$j_{sa} \leq j_{sa}^l - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^l\} \wedge$

$s > 5 \wedge s = s + l_{k_1} \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_Z^{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_s+j_s-k)} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{\quad}{\quad} \binom{\quad}{\quad}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_{k_1}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \binom{\quad}{\quad} \binom{\quad}{\quad}$$

$$\frac{(n_{ik}+j_{ik}-j_{sa}-j_i)!}{(n_{sa}=n-l_{k_1}+1) \cdot (n_s-n-j_i)!} \cdot \frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+1)!}$$

$$\frac{(n_{ik}-l_{k_1}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}} \binom{\quad}{\quad}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j_{sa} - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \binom{()}{j_s} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{sa + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_i + n + j_{sa} - D - s - 1)} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
& \frac{(D + l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
& \sum_{j_i=j_{sa}^{ik}+1}^{j^{sa}+l_i-j_{sa}} \sum_{(l_s+j_s-k)} \sum_{l_i-k+1}^{l_i-k+1} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_k)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_k - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_k)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_k - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_k)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s}^{n-l_i-k+1} \sum_{j_{ik}=j_{sa}^{ik}-k}^{l_s+j_{sa}^{ik}-k} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_i-j_s+1} \sum_{n_{is}=n-k-j_s+1}^{n_i-j_s+1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}^k-k} \sum_{(j^{sa}=l_{sa}+l_{ik}-j_{ik})}^{(l_i+n+j_{sa}-D-s-1)} \sum_{i=n-D}^{i-k+1}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n_{ik}+l_{k_1}-j_{ik}+1}^{(n_i-j_s+l_{k_1})} \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{sa}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_{sa}-j_i)}^{(j^{sa}-j_i)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

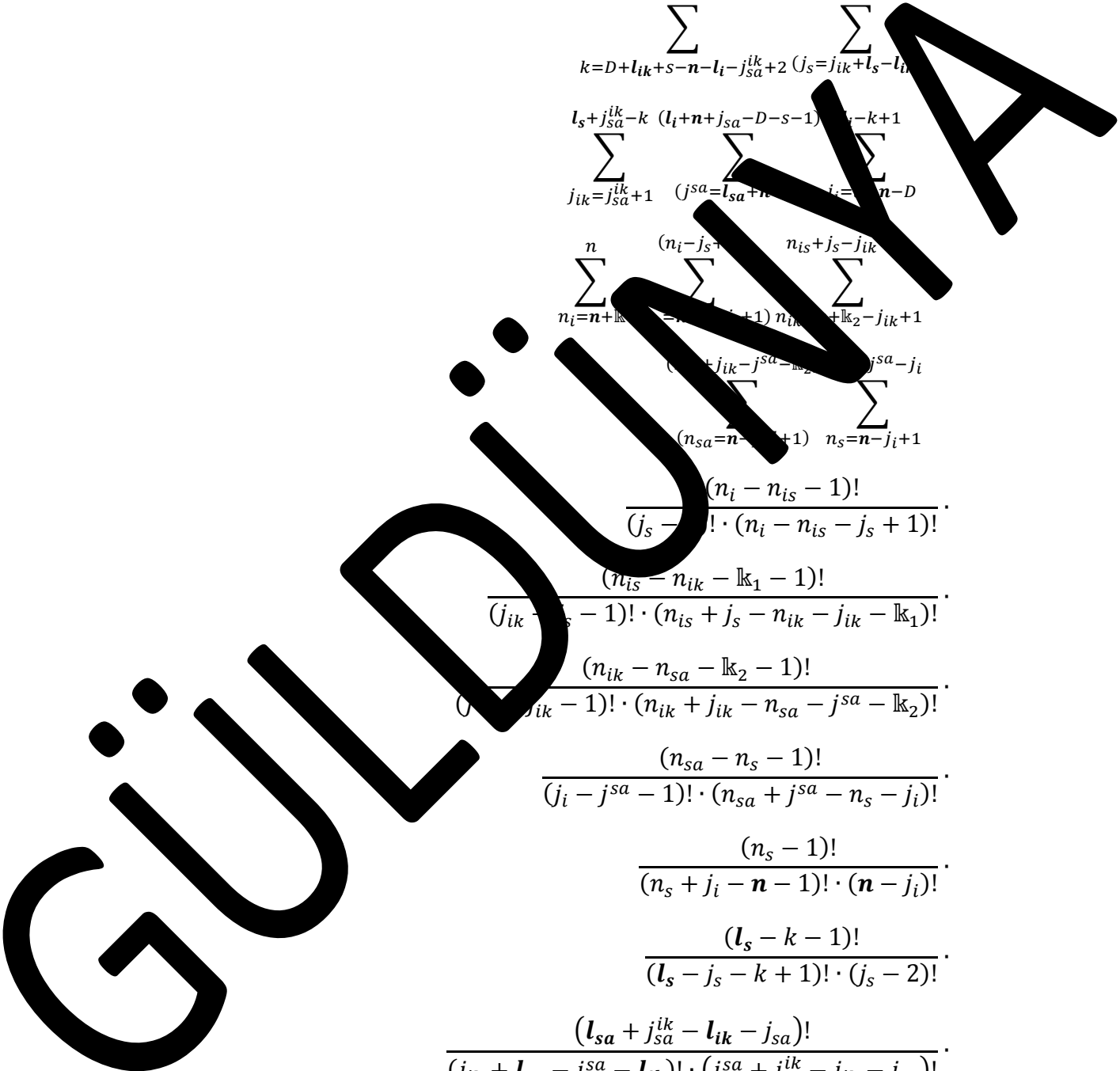
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^k - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^k - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \binom{(\quad)}{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{j_i=j_{sa}+s-j_{sa}}^{(l_{sa}-k+1)} \sum_{j_i=j_{sa}+s-j_{sa}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j_s-1)! \cdot (n_{sa}-j_{sa}-j_i)!}{(n_{sa}-n+l_k+1)! \cdot (n_s-n-j_i)!} \\
 & \frac{(n_s-n+l_k-1)!}{(j_s-2)! \cdot (n_{sa}+j_{sa}-j_i)!} \\
 & \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \binom{(\quad)}{(\quad)} \\
 & \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(\quad)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_i}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-i^{l+1})} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-i^{l+1}} \sum_{j_i=l_i+n-D}^{( )}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(l_{sa} + l_i - j_i - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} + l_s - l_{ik})}^{( )} \\
 & \sum_{j_{ik} = j^{sa} + j_{sa}^{lk} - j_{sa}}^{(l_s + j_{sa} - k)} \sum_{(j^{sa} = l_i + n + j_{sa} - D - s)}^{( )} \sum_{j_i = j^{sa} + s - j_{sa}}^{( )} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{( )} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{( )}
 \end{aligned}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

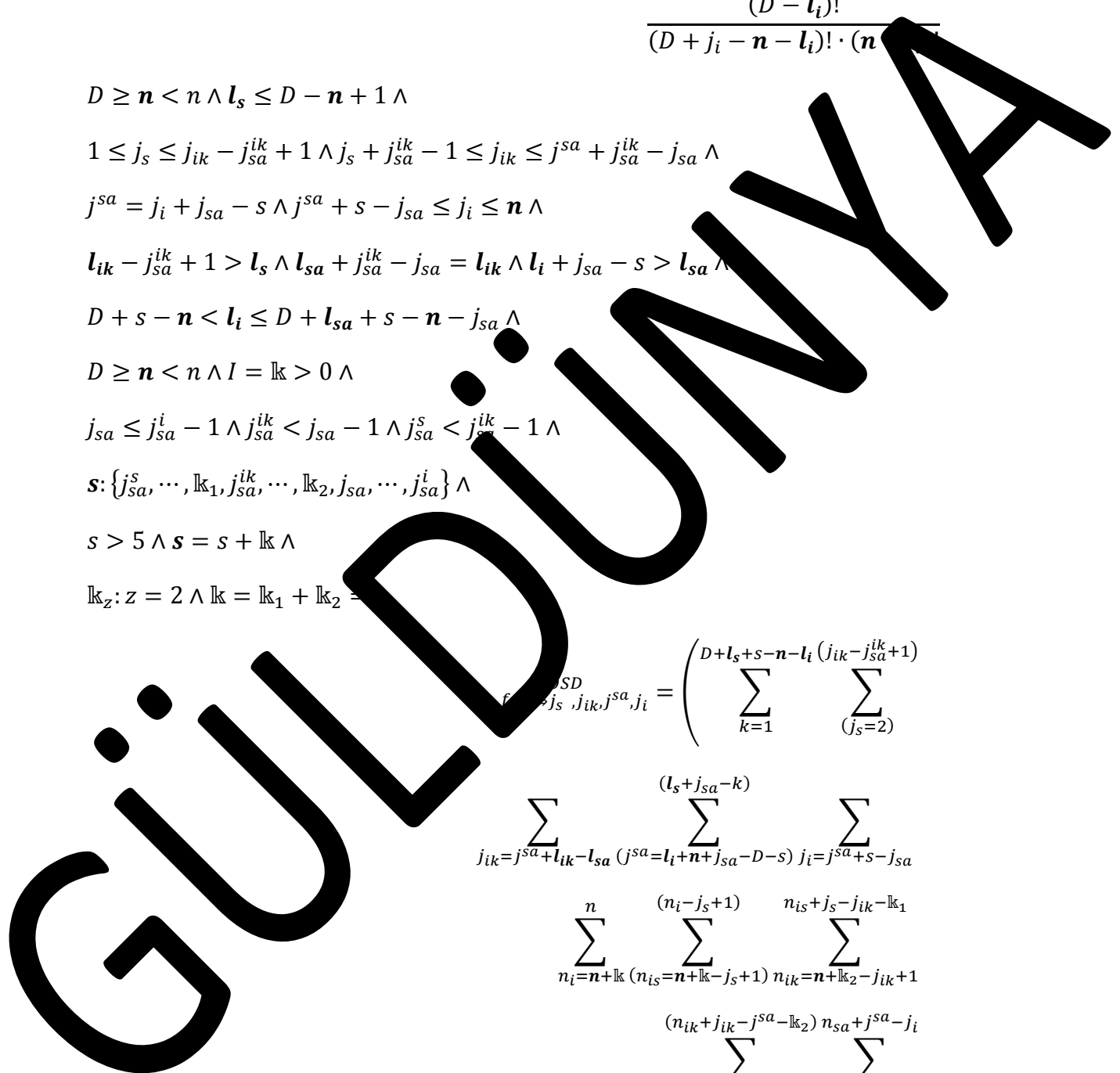
$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$f_{j_s, j_{ik}, j^{sa}, j_i}^{SD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(l_s+j_{sa}-k)} \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_i=n+\mathbb{k})} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \right) \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$





$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - l_{ik} - k + 1)! \cdot (n - l_s - k + 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_s - l_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s}^{n} \sum_{l_{ik}=l_{sa}}^{(n_i-j_s+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{j_i=j^{sa}+s-j_{sa}}^{n_{ik}=n+\mathbb{k}_2-j_{ik}+1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+l_{ik}-l_{sa}}^{(l_i+n+j_{sa}-D-s-1)} \sum_{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{l_i-k+1} \sum_{(j_{sa}^{ik}=l_i+n-D)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_s-1)}^{n_{is}+j_s-k-k_1} \\
 & \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_{sa}^{ik})} \sum_{(n_{sa}+j_{sa}-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{is}+j_{sa}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{n_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_i-n_{ik}-j_{ik}-k_1)} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)!} \cdot (n - j_i)! \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - l_{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} - l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k = D + l_{sa} + s - n - l_i - j_{sa} + 2}^{i^{l-1}} \sum_{(j_s = 2)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = j^{sa} + l_{ik} - l_{sa}}^{(l_{ik} + j_{sa} - k - j_{sa}^{ik} + 1)} \sum_{(j^{sa} = l_{ik} + n + j_{sa} - D - j_{sa}^{ik})}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{l=1}^{\binom{D}{j_s=1}} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=l_i+n-D}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - 1)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - n - s)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_s + s - n - l_i} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{j_{ik} - j_{sa}^{ik} + 1} \cdot \\
 & \sum_{j_{ik}=n+l_{ik}-l_{sa}}^{n+l_{ik}-l_{sa}} \sum_{j_i=n+j_{sa}-D-s}^{n+l_{ik}-l_{sa}} \sum_{j_i=j^{sa}+s-j_{sa}}^{(l_s - j_{sa} - k)} \cdot \\
 & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \cdot \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{()} \cdot \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-n-(j_{ik}-j_{sa}^{ik}+1))} \\ & \sum_{j_{ik}=l_{ik}}^{(j_{ik}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{sa}=l_{sa})}^{(j_{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_i=j_{sa}+l_i-l_{sa})}^{(j_i-j_s+1)} \\ & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \\ & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{sa}+j^{sa}-j_i)} \sum_{n_s=n-j_i+1}^{(n_s-1)!} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_i-l_i} \sum_{j_s=0}^{n-l_i-k+1} \sum_{j_{ik}=l_{ik}+1}^{n-l_i-k+1} \sum_{j_{sa}=0}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{sa}^{ik}+1} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{n-l_i-k+1} \sum_{n_{is}=n+l_k}^{n-l_i-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \dots \\
 & \sum_{n_i=n+\mathbb{k}_1}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \dots \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-k_1-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-l-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s = j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \leq 5 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-\mathbb{k}_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_i - k + 1)! \cdot (n - j_i - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa}^{ik})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{s=0}^{D+l_{ik}+s} \sum_{i=j_{sa}^{ik}+1}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+2} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_s=j_{sa}^{ik}+1}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+2} \sum_{(j_s=j_{sa}^{ik}+1)}^{(j_s=j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_i=j^{sa}+l_i-l_{sa})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{j_i} \sum_{l=0}^{j_s - k} \sum_{j_{ik}=j_s - l}^{j_s - l - k} \sum_{j_{sa}=l_i + n - l - k - D - s}^{j_s - l - k - s + 1} \sum_{n_{ik}=n+k-j_{ik}+1}^n \sum_{n_{sa}=n+k_2-j^{sa}+1}^{(n_i - j_{ik} + 1)} \sum_{(n_{ik} = n + k - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \sum_{(n_{sa} + j^{sa} - j_i - k_2)}^{(n_i - j_{ik} + 1)} \sum_{(n_s = n - j_i + 1)}^{(n_i - j_{ik} + 1)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+l_s-l_{ik}}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \binom{l_{ik}-k+1}{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j_{sa}+l_i-l_{ik}} \binom{j_{sa}+l_i-l_{ik}}{j_i=j_{sa}+l_i-l_{ik}}$$

$$\sum_{n_i=n+k}^n \binom{n_i-j_s+1}{n_{is}=n+k-j_s+1} \sum_{n_{ik}=n_{is}-j_{ik}-k_1} \binom{n_i-j_s+1}{n_{ik}=n_{is}-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-k_2)} \binom{n_{sa}=n_{sa}+j_s}{n_{sa}=n_{sa}+j_s}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s < D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_{sa} + j_{sa}^{ik} - 1 \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} + j_{sa} + j_{sa}^{ik} - j_{sa} \leq n \wedge$$

$$l_{ik} - j_{ik} + 1 = l_s \wedge l_s + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + j_i + s - n - j_{sa} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\{k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s}^{( )}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\frac{(n_{ik}+j_{ik}-j_s-1)! \cdot (n_{sa}-j^{sa}-j_i)!}{(j_s-2)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{ik}-k_1-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-n_{sa}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-k_2)!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \left( \frac{(D - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{l_i + j^{sa} - l_i - j_{sa}^{ik} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})} \right) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_i + j^{sa} - l_i - j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = l_{sa} + n - D)}^{(j_i + j_{sa} - s - 1)} \sum_{j_i = l_i + n - D}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{sa}^{ik}+1}^{l_i+n+D-s-1} (l_{sa}+1) \sum_{l_i-k+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}} \sum_{(j_s=j_{ik}+l_s-k)}^{l_i-k+1} \sum_{(j^{sa}=j_{ik}-j_{sa}-j_{sa}^{ik})}^{l_i-k+1} \sum_{(j_i=j^{sa}-j_{sa}^{ik})}^{l_i-k+1} \sum_{(j_{sa}=j_{ik}-j_{sa}^{ik})}^{l_i-k+1} \sum_{(j_{sa}=j_{ik}-j_{sa}^{ik})}^{l_i-k+1} \\
 & \sum_{i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_{sa}+j^{sa}-j_i)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j^{sa}=l_{sa}+1}^{(l_i+n+j_{sa}-D-s-1)} \sum_{j_i=n-D}^{l_i-k+1}$$

$$\sum_{n_i=n+l_{ik}+1}^n \sum_{n_{is}=n_{ik}+1}^{(n_i-j_s)} \sum_{n_s=n-j_i+1}^{n_{is}+j_s-j_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜSÜNYA

$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}^{ik}}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{(n_{ik}+j_{ik}-k_1) \cdot (n_{sa}+j_{sa}-j_i)}{(n_{sa}=n-k_1+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(j_s=j_{ik}+l_s-l_{ik})}
 \end{aligned}$$

GÜLDENREYNA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_2}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{is}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1) \cdot (n_{ik}+j_s-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1) \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{lk}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{lk}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{(l_{sa}-l+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-l+1} \sum_{j_i=l_i+n-D}
 \end{aligned}$$

GÜLDÜZ

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_s + j_i - n - j_i - j_i)!}$$

$$\frac{(l_{sa} + j^{sa} - l_{ik} - j_{sa})!}{(l_{sa} + j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(l_i + j - l_{sa} - s)!}{(l_{sa} + l_i - j - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!}$$

GÜLDEN

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$$\frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_i^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 =$$

$$f_{z^s} = \sum_{j_i=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s = j_{ik} + l_s - l_{ik}}^{D + l_{ik} - n - l_i - j_{sa}} \binom{D + l_{ik} - n - l_i - j_{sa}}{j_s} \cdot \\
 & \sum_{j_{ik} = l_i + j_s - k}^{l_i + j_{sa} - k - s + 1} \binom{l_i + j_{sa} - k - s + 1}{j_{ik}} \cdot \sum_{j_i = j^{sa} + l_i - l_{sa}}^{j^{sa} + l_i - l_{sa}} \binom{j^{sa} + l_i - l_{sa}}{j_i} \cdot \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i}^{i^{l-1}} \sum_{j_s=j_{ik}+l_s-k}^{j_s=j_{ik}+l_s-k} \sum_{j_{ik}=j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j_{sa}=l_i+n-l_i-D-s}^{j_{sa}=l_i+n-l_i-D-s} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_{is}=n_{is}-j_s+1}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜZYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \binom{( )}{j_s=1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(l_i + j_{sa} - i^{l-s+1})} \sum_{(j_{sa}=l_i+n+j_{sa}^{ik}-D-s)}^{( )} \sum_{j_i=l_{sa}}$$

$$\sum_{n_i=j_{ik}+1}^{(n_i - j_{ik} + 1)} \sum_{(n_i - j_{ik} + 1)}$$

$$\sum_{n_{sa}=l_{k_2} - j_{sa} + 1}^{n_{ik} + j_{ik} - l_{k_1} - (n_{sa} + j_{sa} - j_i - l_{k_2})} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

GÜLDENWA



$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k - 1)!}$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^i > 5 \wedge j_{sa}^i + s + k \wedge$$

$$k_2: z \geq 2 \wedge k_2 \geq k_1 \Rightarrow$$

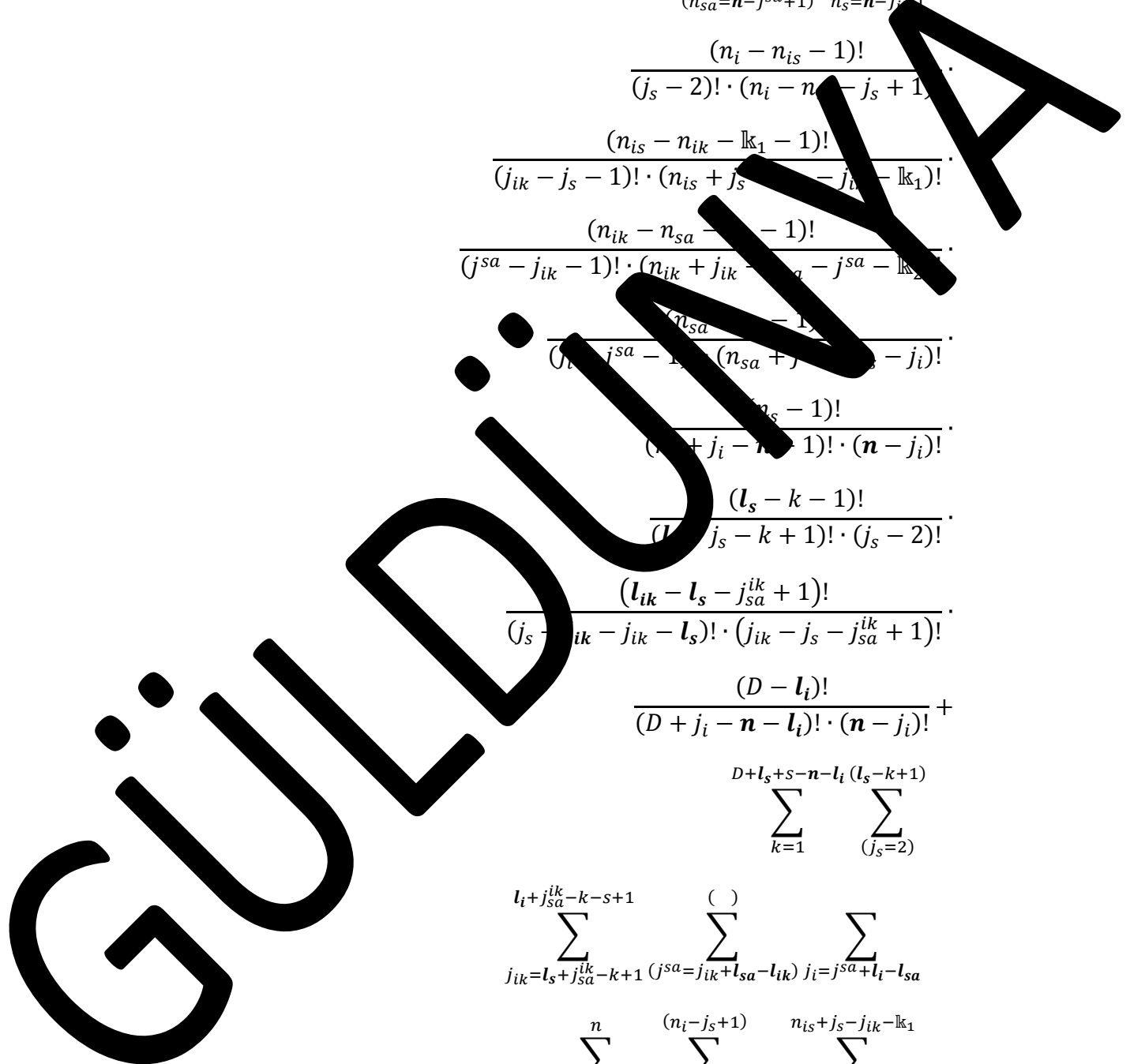
$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_i=1}^{(j_i - l_i)} \sum_{j_s=1}^{(j_s - k)} \sum_{j_{ik}=n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s} \sum_{j_{ik}=n+l_{sa}-l_{ik}}^{(j_s - k + l_{sa} - l_{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=l_s+l_i-l_{sa}}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-k_1}^{()} \\
 & \sum_{(n_{sa}=n_{ik}-j_{sa}^{ik}-k_1)}^{()} \sum_{j_{sa}=j_i}^{()} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot k_1 - j_i - k - k_1 - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s < D - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s - j_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$j_s > n - l_i \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()} \right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n_{is}+j_{ik}-\mathbb{k}_1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-\mathbb{k}_2)}^{(n_{is}+j_{ik}-\mathbb{k}_1)}$$

$$\frac{(n_i - n_{is})}{(n_{is} - \mathbb{k} - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{is} - \mathbb{k} - 1)!}{(j_{ik} + j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{is} - \mathbb{k} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{()}$$

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$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{lk} - D - s}^{l_s + j_{sa}^{lk} - k} \sum_{(l_{sa} - k + 1)} \sum_{j_i = j_{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_i}^{n_{is} + j_s - j_{ik} - k_1} \\
 & \sum_{(n_{sa} = n - j_{sa} + 1)}^{(n_{ik} + j_{ik} - j_{sa} - k_2)} \sum_{(n - j_i + 1)}^{n_{sa} + j_{sa} - j_i} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! (n_i - n_{is} - 1)!} \cdot \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! (n_i - n_{is} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! (n_{ik} + j_{ik} - n_{sa} - j_{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(n_i - j_{sa} - 1)! (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{lk} - l_{ik} - j_{sa})!}{(l_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{lk} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k = D + l_{ik} + s - n - l_i - j_{sa} + 1}^{D + l_{sa} + s - n - l_i - j_{sa} + 1} \sum_{(j_s = j_{ik} + l_s - l_{ik})}$$

$$\sum_{j_{ik} = j_{sa}^{lk} + 1}^{l_s + j_{sa}^{lk} - k} \sum_{(l_{sa} - k + 1)} \sum_{j_i = j_{sa} + s - j_{sa}}$$

$$\sum_{n_i = n + k}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-l_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \right. \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \left. \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \right)
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+l_i-j_{sa}^{ik}+1} \binom{D+l_{ik}+l_i-j_{sa}^{ik}+1}{j_s=j_{ik}+l_s-l_{ik}} \cdot \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_i+n+j_i-D-s-1} \binom{l_{sa}-k+1}{j^{sa}=l_{sa}+n-D} \binom{l_i-k+1}{j_i=l_{sa}+s-k-j_{sa}+2} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \cdot \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa})!} \cdot \\
 & \frac{(D + l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_{ik}+j_{sa}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \\
 & \sum_{j_{ik}=l_i}^{l_s+j_{sa}-k} \sum_{(l_{sa}-k+1)} \sum_{l_i-k+1} \\
 & \sum_{j_{ik}=l_i}^{j_{sa}-D-j_{sa}^{ik}+1} \sum_{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - l_i)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}} \sum_{j_s=j_{ik}+l_s-k}^{j_s=j_{ik}+l_s-k+1} \sum_{j_{ik}=j_s+1}^{l_s+j_{sa}+j_{sa}^{ik}-j_{sa}-D-j_s} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{sa}+j_{sa}^{ik}-j_{ik}-l_{k_1}}^{n_{sa}+j_{sa}^{ik}-j_i} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^{ik}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=j_{ik}+l_s-l_{ik}}^{( )}$$

$$\sum_{j_{ik}=j_{sa}+1}^{l_s+j_{sa}^k-k} \sum_{j^{sa}=l_i+n+j_{sa}-D-s}^{(l_{sa}-k+1)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{n_{is}=n_{ik}+l_{k_2}-j_{ik}+1}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^k - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^k - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=l_i+n}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-l_i-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \frac{(n_{ik}+j_{ik}-j_{sa}-j_i)}{(n_{sa}=n-l_i+1)} \cdot \frac{(n_{sa}-j_{sa}-j_i)}{(n_s=n-j_i)} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_i-j_s+1)!} \\
 & \frac{(n_{ik}-l_{k_1}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=l_i+n-D}^{l_i-l+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j_{sa}^{sa+1}}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{sa}+j_{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_s + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_s + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_s+j_{sa}^{lk}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{lk})}^{( )} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDENWA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} - l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \leq 5 \wedge s = s - k \wedge$$

$$k_2 = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{( )} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_{sa}-1)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(n_i-n_{is}-1)!} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
 \end{aligned}$$

GÜLDENKA



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - l_{ik} - k + 1)! \cdot (n - l_s - k + 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j^{sa} + 1)!}{(j_s + l_{ik} - j^{sa} - l_s - 1)! \cdot (j_{ik} - l_{ik} - j^{sa} + 1)!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{l_{sa}+s-n} \sum_{j_s=2}^{l_s-k+1} \sum_{j_{ik}=l_i+1}^{j_{sa}-D-s} \sum_{j_{sa}=j_{ik}+l_{sa}-l_{ik}}^{(n)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(n)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \left( \sum_{j_s=2}^{D+l_s+j_{sa}^{ik}+1} \sum_{j_{ik}=l_{ik}+1}^{j_{ik}+l_{sa}^{ik}+1} \sum_{j_i=l_i+n-D}^{l_i-k+1} \sum_{n_{is}=n+l_k-j_s+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \right) \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜMÜN

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{D+l_s+s-n-l_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{l=2}^{l_i}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-l_{sa}-l_{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j_{ik}+l_{sa}-l_{ik}}^{l_i} \sum_{j_{sa}+s-j_{sa}+1}$$

$$\sum_{n_i=n+l_{sa}-j_{sa}^{ik}-l_{ik}}^n \sum_{n_{ik}=n+l_{sa}-j_{sa}^{ik}-l_{ik}}^{n+l_{sa}-j_{sa}^{ik}-l_{ik}} \sum_{n_{ik}=n+l_{sa}-j_{sa}^{ik}-l_{ik}}^{n+l_{sa}-j_{sa}^{ik}-l_{ik}}$$

$$\sum_{j_{sa}=n-j_{sa}^{ik}+1}^{n+l_{sa}-j_{sa}^{ik}-l_{ik}} \sum_{n_s=n-j_i+1}^{n+l_{sa}-j_{sa}^{ik}-l_{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j_{ik}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-k+1}^{n_{is}+j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{ik}-1)}^{(n_{ik}+j_{ik}-l_{sa}-k_2)} \sum_{(n_{is}=n_{sa}+j^{sa})}^{(n_{sa}+j^{sa})} \\
 & \frac{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \frac{(n_{is}-k_1-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-k}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_2)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_{sa}+j^{sa}-n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{l_i-k+1}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(j_s + j_i - n + 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+n-D}^{l_i-l+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

GÜLDÜŞMAYA

$$\begin{aligned}
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - j_{ik} + 1)!}{(l_{ik} - j_{ik} - l_s - 1)! \cdot (l_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (l_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{()} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{s + j_{sa}^{ik} - k} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{()} \sum_{j_i = j^{sa} + s - j_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z, j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)} (n+i) \sum_{j_{ik}=l_{ik}+n-D}^{D-s-1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - 1)!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (n_{sa} + j_{sa}^{ik} - j_{ik} - l_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{l_s - j_s - k} \sum_{j_s=2}^{l_s + s - n - l_i - k} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i - j_s + 1)} \sum_{n_{ik}=n+l_{k_2} - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik} + j_{ik} - j^{sa} - l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{(D + j_i - n - l_i - (l_s - k + 1))! \cdot (n - j_i - (l_s - k + 1))!} + \\
 & \sum_{j_s=2}^{D + j_i - n - l_i - (l_s - k + 1)} \frac{(l_{ik} - k + 1)! \cdot (l_i + j_{sa} - j_s + 1)!}{(j_{ik} + j_{sa} - k + 1)! \cdot (j^{sa} - k + j_{sa} - j_{sa}^{ik})!} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{(n - j_s + 1)} \\
 & \sum_{n_i=n+k}^{(n - j_s + 1)} \sum_{(n_{is}=n+k-j_s+1)}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{(n_{ik} + j_{ik} - j^{sa} - k_2)} \sum_{(n_{sa}=n-j^{sa}+1)}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=D+l_s}^{i-1} \sum_{s=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{n+j_{sa}-D}^{(l_i+j_{sa}-l_s+1)} \sum_{j^{sa}=l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}-j_s+1}^n \sum_{n+l_{ik}-j_s+1}^{j_s+1} \sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{j_{ik}-k_1}$$

$$\sum_{s_a=n-j^{sa}+1}^{+j_{ik}-j^{sa}-k_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜNYA

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \sum_{j_s=1}^{( )} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{j^{sa}=l_i+n}^{(l_i+j_{sa}-i+1)} \sum_{j_{sa}=n-D-s}^{(n_i-j_{ik}+1)} \sum_{j_{ik}=l_{ik}+n-D}^{(n_i-j_{ik}+1)} \sum_{j_{sa}=n-D-s}^{(n_{sa}+j_{ik}-j_{ik}+1)} \sum_{j_{sa}=n-D-s}^{(n_s-n-j_i+1)}$$

$$\frac{(n_i - j_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{( )}$$

GÜLDÜZMAYA

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n_s=l_{k_1}+j_{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_{ik} - l_{k_2} - l_k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - n_s - j_s - j_{ik} - l_{k_2} - l_k + j_{sa})!}$$

$$\frac{1}{(n_{is} - j_s - s)!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}{(l_s - l_i)!}$$

$$\frac{(D - j_i - n - l_i)! \cdot (n - j_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + \dots$   
 $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$   
 $j^{sa} = j_i + j_{sa} - j_{sa} \wedge j^{sa} + s - j_{sa} = j_i \leq n \wedge$   
 $l_{ik} - j_{sa} + j_{sa}^{ik} = l_s \wedge l_{ik} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$   
 $D + s - n < l_i \leq D + l_{ik} - n - j_{sa}^{ik} \wedge$   
 $D \geq n < n \wedge l = l_k > \dots \wedge$   
 $j_{sa} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$   
 $s: \{j_{sa}^{ik}, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$   
 $s > 5 \wedge s = \dots + l_k \wedge$   
 $\dots \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$fz_{\Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}-l_{k_1}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n=n-j_i+1)}^{n_{sa}+j^{sa}} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDÜZ

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_{is}+j_s-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j_{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot
 \end{aligned}$$

GÜLDENREYNA



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - k - 1)!}{(l_s - \dots - k + 1)! \cdot (n - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - \dots)!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - \dots)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=j_{sa}^{ik}} \sum_{l=s+1}^{(l_i + j_{sa} - i l - s + 1)} \sum_{j_i=j^{sa} + l_i - l_{sa}} \sum_{n_i=n+k}^n \sum_{n_{sa}=n+k_2-j^{sa}+1}^{(n_i - j_{ik} + 1)} \sum_{n_s=n-j_i+1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1) \cdot (n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_{sa}=j_i+j_{sa}-j_{sa}^{ik})} \sum_{(j_{sa}=j_i+l_{sa}-l_{sa}^{ik})}^{(j_{sa}-l_{sa})}$$

$$\sum_{n_i=n+k}^n \sum_{(n_i+l_{ik}-l_{ik}^{ik})}^{(n_i-j_s+1)} \sum_{(n_i+l_{ik}-l_{ik}^{ik})}^{(n_i-j_s-j_{ik}-k_1)}$$

$$\sum_{(n_{sa}=n_i+j_{ik}-j_{sa}^{ik})}^{(n_{sa}=n_i+j_{sa}-j_i)} \sum_{(n_{sa}=n_i+j_{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s) \cdot (j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s) \cdot (j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - \dots + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - \dots \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + \dots - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + \dots = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i} S^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=n-s-j_{sa}}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s-1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{(n_{ik}=n+\mathbb{k}_2-j_s-1)}^{(n_{ik}+j_{ik}-j^{sa}-n_{sa}+j^{sa}-j_i)} \sum_{(j^{sa}=l_i)}^{(j^{sa}=l_i)} \sum_{(j_i+1)}^{(j_i+1)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(l_{sa}-k+1)}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_{sa}+j^{sa}-n-j_i+1)}^{(n_{sa}+j^{sa}-n-j_i)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)!(n_{ik}+j_s-n_{sa}-j^{sa}-k_2)!} \cdot \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(l_{sa}-k+1)}^{(j_{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_{is}+j_s-j_{ik}-k_1)}
 \end{aligned}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{is} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_{is} + j_s - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right. \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_i+j_{sa}-s-1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_{sa}+s-k-j_{sa}+1} \sum_{j_i=l_i+n-D} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \left. \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \right. \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_i - l_{sa} - s)!}{(j^{sa} + l_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_i-s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-k+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa})!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - l_{sa} - s)!} \cdot \\
 & \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{i_s=1}^{l_{ik}+s-n_{ik}-j_{sa}^{ik}+1} \sum_{i_s=l_i+n-D-s+1}^{l_{ik}+2} \\
 & \sum_{i_s=l_{ik}}^{(l_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j^{sa}+2}^{D+l_{sa}+s-n-l_i-j^{sa}-(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_s=2}^{j_s-1} \sum_{j_{ik}=j_s-l_s(j^{sa}-n-D)}^{j_{ik}-s-1} \sum_{j_i=l_i+n-D}^{j_i-s-k-j_{sa}+1} \sum_{i=n+k}^n \sum_{i_s=n-k-j_s+1}^{n-i-j_s+1} \sum_{i_k=n+k_2-j_{ik}+1}^{n_i+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{ik}-j^{sa}-k_2} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{i_k} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i+1} \sum_{j_i=k-j_{sa}+2}^{l_i-k-j_{sa}+2} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \sum_{(n_{is}+j_{ik}-j^{sa}-1)}^{(n_{is}+j_{ik}-j^{sa}-1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-l_{ik}+1)}^{(n_{sa}=n-l_{ik}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜŞMÜŞA

$$\begin{aligned}
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-k_1+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{n_{sa}-j_i} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDENWASSER

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_{sa}=l_{sa}+n-D)}^{(l_{sa}-l_{i+1})} \sum_{j_i=l_i+n-D}^{l_i-l_{i+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j_{sa}+1}^{n_{ik}+j_{ik}-j_{sa}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{sa}+j_{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j_{i+1} - 1)! \cdot (j_i + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_i + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{( )} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s - j_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1$$

$$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$$

$$s \leq 5 \wedge s = s - k \wedge$$

$$k_z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_i+j_{sa}-k-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (l_s - k - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_s)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D}^{i^{l-1}} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_{ik}-l_s}^{(i+j_{sa}-k-s+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{j_i} \sum_{l=0}^{j_i - k} \binom{j_i - k - l}{k} \binom{j_i - k - l}{l} \\
 & \sum_{j_{ik}=j_s}^{j_i} \sum_{j_{sa}=l_i+n_{ik}-D-s}^{j_i-j_{ik}-s+1} \binom{j_i-j_{ik}-s+1}{j_{sa}} \binom{j_i-j_{ik}-s+1}{j_{ik}-j_{sa}-l_{k_1}} \\
 & \sum_{n_{ik}=n+l_{k_1}}^n \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{(n_i-j_{ik}+1)} \binom{n_i-j_{ik}+1}{n_{ik}=n+l_{k_1}-j_{ik}+1} \binom{n_i-j_{ik}+1}{n_{sa}+j^{sa}-j_i-l_{k_2}} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{(n_i-j_{ik}+1)} \sum_{(n_s=n-j_i+1)} \binom{n_i-j_{ik}+1}{n_{sa}+j^{sa}-j_i-l_{k_2}} \binom{n_i-j_{ik}+1}{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(\cdot)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+l_i-l_s}^{(\cdot)} \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n_{i_s}-j_{ik}-l_{k_1}}^{(\cdot)} \sum_{(n_{sa}=n_{i_k}+j_{ik}-j_{sa}-l_{k_2})}^{(\cdot)} \sum_{n_s=n_{sa}+j_s}^{(\cdot)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_s - j_i - l_{k_1} - l_{k_2})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k_1} - j_s - j_i - l_{k_1} - l_{k_2} - j_s^s)!} \cdot \frac{(j_s + j^{sa} - j_s - s)!}{(l_s - k - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + j_{sa}^{ik} - 1 \leq j_s \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \leq n \wedge$

$l_{ik} - j_{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n - l_i \leq D + j_i + s - n - 1 \wedge$

$D > n \wedge l = l_{k_1} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\{l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + l_{k_1} \wedge$

$l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$



$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n-k_1-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n-k_1-j_{sa}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{n_s=n-j_i}^{n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{is} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (j_i - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{j_s=1}^{( )} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_i} \sum_{( )}^{i^{l-s+1}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{( )} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_s-k+1}{j_s=l_i+n-l_s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}} \binom{l_s-k+1}{j_{sa}=j_{ik}+l_{sa}} \binom{l_s-k+1}{j_i=j_{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}} \binom{l_s-k+1}{j_s+1} \sum_{n_{ik}=n+l_{ik}-j_s} \binom{l_s-k+1}{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_{k2})} \binom{l_s-k+1}{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s > l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_{sa} + s - n - j_{sa} \wedge$$

$$D \geq n < n \wedge l = l_{k1} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{j_s=2}^{l_i+n-D} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{l_{sa}-k+1} \sum_{j_{sa}=l_i+n+j_{ik}-D-s}^{j_{sa}+j_{ik}-\mathbb{k}_1} \sum_{j_i=j_{sa}+j_{ik}-\mathbb{k}_1}^n \sum_{n_{is}=l_{ik}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=j_{sa}-j_{ik}+1}^{n_{ik}+j_{sa}-\mathbb{k}_2} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \right) \cdot \frac{(n_i-n_{is}-1)!}{(j_{sa}-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j_{sa}-l_{ik})! \cdot (j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{ik}+j_{ik}-l_{k_1})}^{(n_{sa}+j_{sa}-j_i)} \sum_{(n_{sa}=n_{ik}+l_{k_1}+1)}^{(n_{sa}-j_{sa}+1)} \sum_{n_s=n-j_i}^{(n_{sa}-j_{sa}+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}
 \end{aligned}$$

GÜLDENREYNA

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) +$$

$$\left( \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{j_s=2}^{l_i+n-D-s} \right)$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{j^{sa}=l_{sa}+n-D}^{(j_i+j_{sa}-s-1)} \sum_{j_i=l_i+n-D}^{l_{sa}+s-k-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(l_i + l_{sa} - l_{sa} - s)!}{(j_i + l_i - j_i - l_s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)}^{l_i-k+1} \sum_{j_i=l_{sa}+s-k-j_{sa}+2} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

GUIDANCE



$$\begin{aligned}
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa}^{ik} - j_{sa} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i - j_{sa})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \cdot \\
 & \sum_{j_{ik}=j_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+s-j_{sa}+1}^{l_i-k+1} \cdot \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \cdot \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=0}^{D+l_{sa}+s-n-j_{sa}+1} \sum_{j_s=2}^{l_s-k+1} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_i+j_{sa}-s-1)} \sum_{j_{sa}=n-D}^{l_{sa}+s-k-j_{sa}+1} \\
& \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
& \frac{(n_{ik}+j_{ik}-j^{sa}-k_2) n_{sa}+j^{sa}-j_i}{\sum_{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1}} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{j_s=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}-l_{ik})} \sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}+n-D)} \sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(l_{sa}+s-k-j_{sa}+2)}$$

$$\sum_{n_i=n-l_{sa}+j_{ik}-j_s}^n \sum_{n_{is}=n+l_{sa}-j_{ik}-j_s+1}^{n-l_{sa}+j_{ik}-j_s} \sum_{n_{ik}=n+l_{sa}-j_{ik}-j_s+1}^{n-l_{sa}+j_{ik}-j_s}$$

$$\sum_{a=n-j^{sa}+1}^{n+l_{sa}+j_{ik}-j_s-l_{sa}-k_2} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(=l_i+n-D)}^{l_i-k+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+l_{is}+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_{ik}+1)}^{n_{is}+j_{ik}-l_{ik}-k_1} \\
 & \sum_{(n_{sa}=n+l_{sa}+1)}^{(n_{ik}+j_{ik}-l_{ik}-k_2)} \sum_{(=n-j_i+1)}^{n_{sa}+j^{sa}-l_{sa}-k_2} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^{\binom{D-l_i}{D+l_s+s-n-l_i}} \sum_{j_s=1}^{\binom{l_s-k+1}{j_s=l_i+n-D-s+1}} \\
 & \sum_{j_{ik}=j_{sa}^{lk}} \sum_{(j_{sa}=l_{sa}+n-D)} \sum_{j_i=l_i+n}^{(l_{sa}-i^{l+1})} \sum_{j_i=l_i+n}^{(l_i-i^{l+1})} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n-i^{j_{ik}+1})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j_{sa}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-k_1)} \\
 & \frac{(n_{ik}-n_{sa}-k_1-1)!}{(j_i-j_{ik}-1)! \cdot (n_{sa}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{ik}-n_{sa}-k_1-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(l_{sa}+j_{sa}^{ik}-j_{sa}-l_{ik})! \cdot (j_{sa}-j_{sa})!} \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} - \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+s-j_{sa}}
 \end{aligned}$$

GÜLDÜZYA

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(l_s - j_s - k - 1)! \cdot (j_s - s)!}$$

$$\frac{(l_s - j_s - k + 1)! \cdot (j_s - s)!}{(D - s)!}$$

$$\frac{(D - s)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s > l_{sa} \wedge$

$D + s - n < l_i \leq D + l_{sa} + s - j_{sa} \wedge$

$D \geq n \wedge l = k - 0 \wedge$

$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge$

$> 5 \wedge j_{sa}^s + k \wedge$

$k_2: z - 2 \wedge k_2 \Rightarrow$

$$f_z S_{\Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \left( \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \sum_{\substack{n_{is}+j_s-j_{ik}-l_{k_1} \\ n_{ik}=n+l_{k_2}-j_{ik}+1}}$$

$$\sum_{\substack{(n_{ik}+j_{ik}-j^{sa}-l_{k_2}) \\ (n_{sa}=n-j^{sa}+1)}} \sum_{\substack{n_{sa}+j^{sa}-j_i \\ n_s=n-j_i+1}}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} - 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_s+s-n-l_i-j_s+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{()} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{\binom{D + j_i - n - l_i}{D + j_i - n - l_i}}{\binom{D + j_i - n - l_i}{D + j_i - n - l_i}} + \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{k_1=0}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{k_2=0}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{j_i=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{j_{sa}^{ik}=l_{sa}-l_{ik}}^{(j_{sa}^{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^{(n_{is}+1)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_{is}+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - l_i)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=2}^{D+l_s+s} \sum_{(j_s=2)}^{(l_{ik}+n-j_{sa}^{ik})} \\
& \sum_{j_{ik}=l_{ik}+n-j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{j_{sa}=j_{ik}-l_{ik}}^{l_i-k+1} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1} \\
& \sum_{n_{is}=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{(n_{sa}=n-j^{sa}+1)}^{l_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{(l_{ik}+j_{sa}^{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
 & \sum_{(n_{sa}=n+l_k-j_{sa}+1)}^{(n_{ik}+j_{ik}-l_k)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \\
 & \frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j_{sa} - l_{k2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j_{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j_{sa} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \binom{(\quad)}{\sum_{j_{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=l_i+n-D}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}-1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{(n_{ik}+j_{ik}-j_{sa}-l_{k_2})} \sum_{n=n-j_i+1}^{n_{sa}+j_{sa}} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1) \cdot (n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_{sa}-l_{k_2}-1)}{(j_{sa}-j_{ik}-1) \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-l_{k_2})!} \cdot \\
 & \frac{(n_{sa}-n_s+1)!}{(j_i-j_{sa}-1) \cdot (n_{sa}+j_{sa}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j_{sa}+l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j_{sa}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+1}^{D+l_{sa}+s-n-l_i-j_{sa}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \binom{(\quad)}{\sum_{j_{sa}=j_{ik}+l_{sa}-l_{ik}}} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_i-k+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_i - l_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{sa}+s-n-l_i-j_{sa}+2}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=l_i+n-D}^{l_i-k+1} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

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$$\frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{ik}-k_2)!} \cdot \frac{(n_s-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{is}+j^{sa}-n_s-j_i-1)!} \cdot \frac{(n_s-1)!}{(n-j_i-1)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-j_{ik}-j_{sa}^{ik}+1)!}{(j_s+j_{ik}-j_{ik}-l_{ik}-1)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(l_i+j_{sa}-l_{sa}-s)!}{(j^{sa}-l_i-j_i-l_{sa})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=l_i+n-D}^{l_i-i^{l+1}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{sa} - s)!}{(j^{sa} + l_i - j_{sa} - l_s + 1)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot \\
 & \left( \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
 & \sum_{i=1}^{n+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_i=j_s+j_{sa}^{ik}-1}^{( )} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+s-j_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{D-s} \sum_{j_{ik}=n-D}^{l_i+n+j_{sa}-s-1} \sum_{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_s=2}^{D+l_s+1} \sum_{j_i=1}^{(l_i+l_s+D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{j_{sa}=j_{sa}^{ik}}^{k-s+1} \sum_{j_i=1}^{n-l_{sa}} \\
 & \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j_{sa}+1}^{l_k+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(l_i+j_{sa}-k-s+1)} \sum_{j_{sa}=l_{sa}}^{j_{sa}-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n-l_k+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜŞMAYA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-k-s+1)} \sum_{j_i=j^{sa}+l_i} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
 & \sum_{(n_{sa}=n_{is}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDENREYNA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{(j^{sa}=l_i+n+j_{sa}-D-s)}^{(l_i+j_{sa}-i-s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa} - 1)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{()} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s - j_{sa} \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - j_{sa}^{ik} \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$

$s \leq 5 \wedge s = s - k \wedge$

$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{is} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n - j_i - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{()}{j_s} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \binom{()}{j^{sa}} \sum_{j_i=l_{ik}+s-k-j_{sa}^{ik}+2}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_i - k + 1)! \cdot (n - j_i - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{n - k + 1} \sum_{j_{sa} = j_i + l_{sa} - l_i}^{( )} \sum_{j_i = l_{sa} + n + s - D - j_{sa}}^{l_{sa} + s - k - j_{sa} + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{n_{sa} = n - j^{sa} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{(n_s)} \sum_{l=j_s}^{(n_s)} \sum_{j_{ik}=j_s}^{(n_s)} \sum_{j_{sa}=j_i+l_{sa}-l_i}^{(n_s)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{(n_s)} \sum_{n_{ik}=n+l_{sa}-j_{ik}+1}^{(n_s)} \sum_{n_{sa}=n+l_{sa}-j_{sa}+1}^{(n_s)} \sum_{n_s=n-j_i+1}^{(n_s)} \\
 & \frac{(n_i - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_s}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_i - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_i - k - k - j_{sa}^s)!} \cdot \frac{1}{(j_s + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + j_{sa} - n \leq l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$$

$$D > n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik}, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(\quad)}{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{ik}}^{l_s+s-k} \binom{(\quad)}{(n_i=n+l_k)} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(\quad)}{(n_{sa}=n+l_k-j_s+1)} \sum_{n_s=n+l_k-j_{ik}+1}^{(n_{ik}+j_{ik}-j_s)} \binom{(\quad)}{(n_s=n+l_k-j_{ik}+1)} \frac{(n_s-n_{sa}-1)!}{(j_s-2)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \cdot \frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(\quad)}{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+s-k+1}^{l_{sa}+s-k-j_{sa}+1} \binom{(\quad)}{(\quad)}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}
\end{aligned}$$

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
& \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j^{sa} - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-l-j_{sa}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{j_s=j_i+l_s-l_{ik}}^{j_s+l_s-l_{ik}} \binom{j_s+l_s-l_{ik}}{j_s} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{j_{ik}=j_i+l_{sa}-l_i} \binom{j_{ik}}{j_{ik}} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{j_{ik}=j_i+l_{sa}-l_i} \binom{j_{ik}}{j_{ik}} \sum_{n_i=n+l_{ik}}^{n_i=n+l_{ik}-j_s} \binom{n_i+l_{ik}}{n_i} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}} \binom{n_{ik}}{n_{ik}} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_{k2}}^{n_{sa}=n_{sa}+j_{sa}-j_i} \binom{n_{sa}}{n_{sa}}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa})!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^i+l_{ik}-l_{sa}}^{(j_{sa}=j_i+l_{sa})} \sum_{j_i=l_{sa}+n+s-l_i}^{(j_i+l_{sa})} \sum_{n+l_{ik}}^{(n_{is}-\mathbb{k}-j_s+1)} \sum_{n_{is}}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{ik}}^{(n_{ik}+j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}=n-j_{sa}+1}^{(n_{sa}+j_{sa}-j_i)} \frac{(n_i - n_{is} - 1)!}{2! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_s+s-k+1}^{(l_{sa}+s-k-j_{sa}+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
 & \frac{(n_{ik}+j_{ik}-l_{sa}-k_2) n_{sa}^{j_{sa}-j_i}}{(n_{sa}-j_{sa}+1) n_s=n_{sa}-j_i} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-k-j_{sa}+1}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{l_s + s - k} \sum_{j_{ik} = n + \mathbb{k} + l_{ik} - l_s}^{n} \sum_{n_{is} = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_s = n_{sa} + j^{sa} - j_i)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

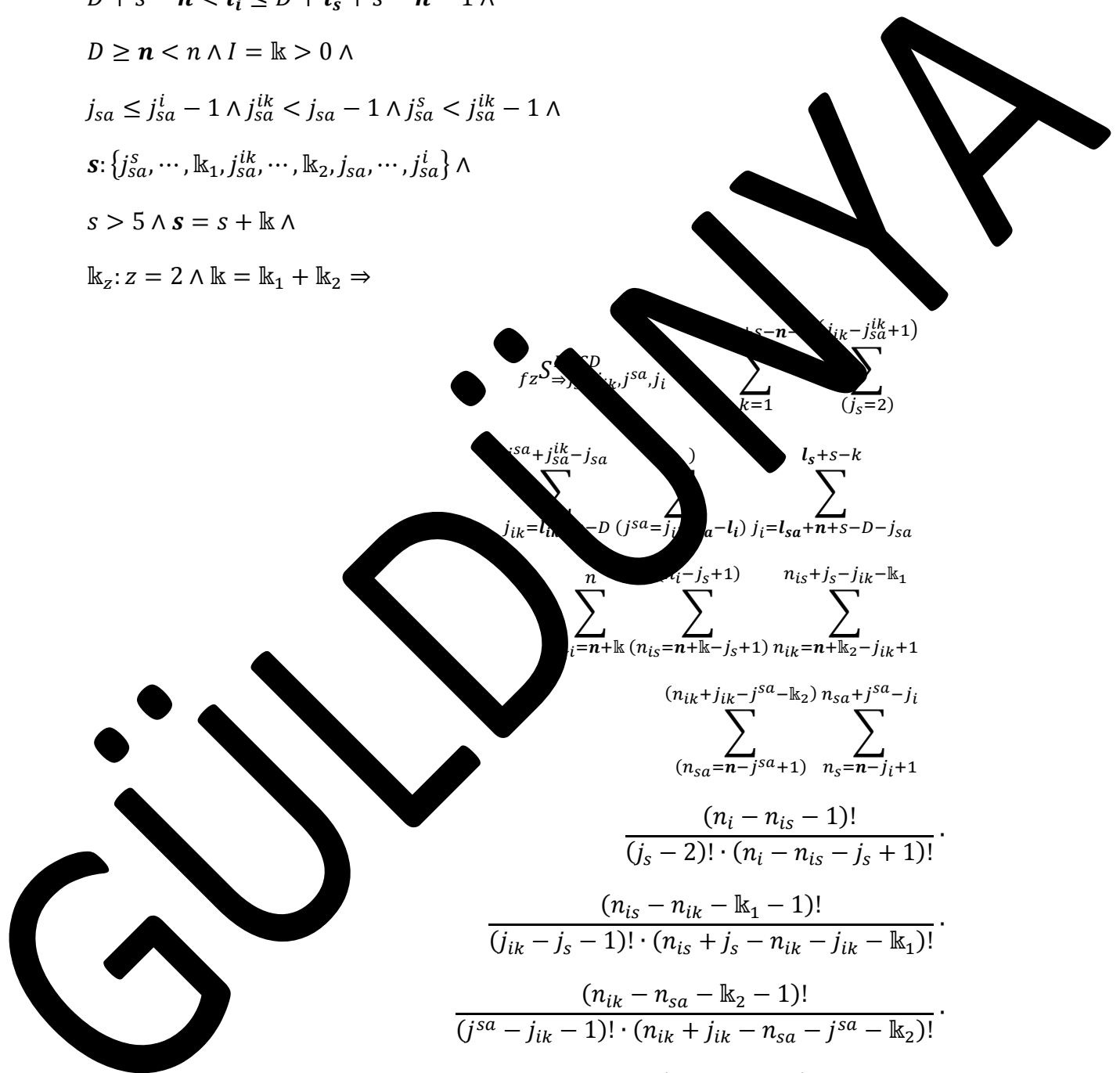
$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=l_{ik}-D}^{s+n-(j_{sa}^{ik}-l_i)} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{n-(i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$



$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_i-l_s} \sum_{j_s=0}^{n-j_s-k+1} \sum_{j_{sa}=0}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{sa}^{ik}+1} \sum_{j_{ik}=l_{ik}-D}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{sa}^{ik}-1} \sum_{j_i=l_s+s-k+1}^{n-l_s-k-j_{sa}^{ik}+1} \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{sa}=n-j_{sa}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n-j_i+1}^{l_k+j_{ik}-j_{sa}-l_{k_2}} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(j_{sa}=j_i+l_{sa}-l_i)} \sum_{j_i}^{(j_{sa}=j_i+l_{sa}-l_i)} \sum_{(j_{sa}=j_i+l_{sa}-l_i)}^{(j_{sa}=j_i+l_{sa}-l_i)} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜŞMÜŞA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D}^{l_{sa}+s-k-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n_{sa}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}-j_{sa}-j_i)} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GÜLDENREINER

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}-i+1}^{l_{ik}-i+1} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_{sa}+s-i-l-j_{sa}+1} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n+j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_{ik} - l_s - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{( )} \sum_{j_i=l_{sa}+n+s-D-j_{sa}}^{l_s+s-k} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}
 \end{aligned}$$

GÜLDÜZYAZ

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s - j_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + s - n - j_{sa}^{ik} - 1$

$D \geq n < n \wedge l = k > 0$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$

$s \leq 5 \wedge s = s - k \wedge$

$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$



$$\begin{aligned}
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+2)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i - j_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_i = D + l_{ik} + s - l_i - j_{sa}^{ik} + 2}^{D - l_i - j_i} (j_s = j_{ik} + l_s - l_{ik}) \\
 & \sum_{j_{ik} = j_{sa}^{ik} + 1}^{l_{ik} - k + 1} \sum_{(j^{sa} = l_{sa} + n - D)}^{(l_{sa} - k + 1)} \sum_{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{j_i} \sum_{l=0}^{j_i - k} \binom{j_i - k}{k} \binom{j_i - k - l}{l} \\
 & \sum_{j_i = n + \mathbb{k}_1}^n \sum_{j_i = n + \mathbb{k}_1}^{(n_i - j_{ik} + 1)} \binom{n_i - j_{ik} + 1}{j_i - n + \mathbb{k}_1} \binom{n_i - j_{ik} + 1}{j_i - n + \mathbb{k}_1 - j_{ik} + 1} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜMÜ

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-1}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik})}^{(\cdot)} \sum_{n_s=n_{sa}+j_s}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_i - j_s - k - k - j_{sa}^s)!} \cdot \frac{1}{(j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_i + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s = j_{sa} \wedge j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n = l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D > n < n \wedge I = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s \in \{1, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \binom{(l_s+j_s-k)}{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \binom{(n_{is}+j_s-j_{ik}-l_{k_1})}{(n_{ik}=n_{is}-j_{ik}+1)} \binom{(n_{ik}+j_{ik}-j_s)}{(n_{sa}=n_{ik}+j_{ik}-j_s)} \binom{(n_{sa}-j^{sa}-j_i)}{(n_{sa}=n_{ik}+j_{ik}-j_s)} \frac{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1}-1)!} \frac{(n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \frac{(n_{sa}-n_s-1)!}{(n_{sa}-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \binom{(l_{sa}-k+1)}{(j^{sa}=l_s+j_{sa}^{ik}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{i}} \sum_{j_s=1}^{\binom{D}{i}} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{\binom{l_{sa}-i+1}{j_{sa}^{sa}+n-D}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{\binom{n}{n_{ik}=n+k-j_{ik}+1}} \sum_{n_{sa}=n+k_2-j^{sa}+1}^{\binom{n_i-j_{ik}+1}{n_{sa}+j^{sa}-j_i-k_2}} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_i+l_s-l_{ik})}^{( )} \sum_{(l_{sa}=j_{sa}-k)}^{( )} \sum_{j_{ik}=j_{sa}+j_{sa}^{ik}}^{( )} \sum_{(j_{sa}=l_{sa}+n_{ik})}^{( )} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{( )} \sum_{n_i=n+l_{ik}}^{( )} \sum_{n_{ik}=n+l_{ik}-j_s}^{( )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{( )} \sum_{(n_{sa}=n_{ik}+j_{sa}-l_{k2})}^{( )} \sum_{n_s=n_{sa}+j_{sa}-j_i}^{( )} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{sa} - s \wedge j_{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$



$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=2}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=j_{sa}^a+l_{ik}-l_{sa}}^{(l_s+j_{sa}-k)} (j_{sa}^a+l_{ik}-l_{sa})^{(n-D)} j_i=j_{sa}^a+l_{ik}-l_{sa} \sum_{j_{ik}+1}^{(n_{is}-\mathbb{k}-j_s+1)} \sum_{j_{ik}+1}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j_{sa}^a+1}^{(n_{ik}+j_{ik}-j_{sa}^a-\mathbb{k}_2)} n_{sa}+j_{sa}^a-j_i \sum_{n_s=n-j_i+1}^{(n_i-n_{is}-1)!} \frac{(n_i-n_{is}-1)!}{2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}^a-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j_{sa}-1)! \cdot (n_{sa}+j_{sa}^a-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_s+j_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k} \\
 & \frac{(n_{ik}+j_{ik}-j^{sa}-l_k) \cdot n_{sa} \cdot (j^{sa}-j_i)}{(n_{sa}-j^{sa}+1) \cdot n_s \cdot (n_s-1)} \\
 & \frac{(n_i - n_s - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{(n_s=n-j_i+1)}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_s - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-i+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}
 \end{aligned}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{j_{sa} - k} \sum_{j_{sa} = l_{sa} + n - D}^{j_i = j^{sa} + l_i - l_{sa}} \sum_{i=n+\mathbb{k}}^n \sum_{(n_i = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{()} \sum_{n_s = n_{sa} + j^{sa} - j_i} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{l_i=n+\mathbb{k}}^{n-(j_s-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j_{sa} - l_{ik})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_i-l_s} \sum_{j_s=0}^{n-l_i-k+1} \sum_{j_{ik}=l_{ik}+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{ik}+1} \sum_{j_{sa}=l_{sa}-k+1}^{j_{sa}+j_{sa}^{ik}-j_{sa}-j_{ik}+1} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{n-l_i-k+1} \\
& \sum_{n_{is}=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n-l_i-j_s+1} \sum_{n_{sa}=n-j_{sa}+1}^{n+l_s+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_{sa}=l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)}^{(l_{sa}-k+1)} \sum_{j_{sa}^{ik}=l_{sa}-l_{sa}}^{j_{sa}^{ik}-l_{sa}} \\
 & \sum_{n_i=n+l_{ik}}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j_{sa}-j_i)}^{(j_{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-l_{k_2}+1)}^{(n_{sa}=n-l_{k_2}+1)} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k}^{n_{is}+j_s-j_{ik}-k} \\
 & \sum_{(n_{sa}=n_{sa}+1)}^{(n_{ik}+j_{ik}-k)} \sum_{(n_s=n-j_i)}^{(n_{sa}-j_i)} \\
 & \frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{(j_s=1)}^{( )}
 \end{aligned}$$

GUIDANCE



$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-l+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik})}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_i - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )} \\
 & \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(l_s+j_{sa}-k)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{( )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - 1)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - 1)!}{(D + j_{sa}^s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^i + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} - l_i + j_{sa} - s - j_{sa} \wedge$

$D + j_{sa} - n < l_{sa} \leq D + l_{ik} + j_{sa} - j_{sa}^{ik}$

$D \geq n < n \wedge l = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$

$s: \{j_s^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\}$

$s \leq 5 \wedge s = s - k \wedge$

$k_{z_1} = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\begin{aligned}
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_s + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + l_{sa} - j_{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{ik}+l_s-l_{ik})} \binom{\quad}{\quad} \\
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \\
 & \frac{\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} n_{sa}+j^{sa}-j_i}{\sum_{n_s=n-j_i+1}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_i - k + 1)! \cdot (l_s - j_i - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa})! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}}^n \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{j_i} \sum_{l=0}^{j_i - k} \binom{j_i - k}{k} \binom{j_i - k - l}{l} \\
 & \sum_{j_i = n + \mathbb{k}_1}^n \sum_{j_i = j^{sa} + l_i - l_{sa}}^{(n_i - j_{ik} + 1)} \binom{n_i - j_{ik} + 1}{j_i = n + \mathbb{k}_1} \binom{n_i - j_{ik} + 1}{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜM

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{(\cdot)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\cdot)} \sum_{j_i=j^{sa}+l_i-l_{ik}}^{(\cdot)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(\cdot)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-k_2)}^{(\cdot)} \sum_{n_s=n_{sa}+j_s}^{(\cdot)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - j_s - j_i - k_1 - k_2)!}$$

$$\frac{1}{(n_i + j_s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa} + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j^{sa} = j_i + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \leq n \wedge$

$l_{ik} - j_{ik} + 1 = l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n \leq l_{sa} \leq D - l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$D > n \wedge I = k > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^i, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + k \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{Z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{sa}+n+j_{sa}^{ik}-D-j_{sa}-1} \binom{(l_{sa}-k+1)}{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-j_{sa}}^{(l_{sa}-k+1)}$$

$$\sum_{n_i=n+l_k}^n \binom{(n_i-j_s+1)}{(n_{is}=n+l_k-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(n_{ik}+j_{ik}-j_s)}{(n_{sa}=n+l_k+1)} \sum_{n_s=n-j_i}^{n_{sa}-j^{sa}-j_i} \binom{(n_s-n_{ik}-1)!}{(j_s-2)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_{ik}-l_{k_1}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(n_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_{k_2})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \binom{(\quad)}{(j_s=j_{ik}+l_s-l_{ik})} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \binom{(l_{sa}-k+1)}{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})! \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{i^{l-1}} \sum_{(j_s=j_{ik}+l_s-l_{ik})}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}
 \end{aligned}$$

GÜLDEN



$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j_{sa} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l=1}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa} - i + 1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j_{sa} - l_{ik})! \cdot (j_{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{k} \sum_{j_s=j_i+l_s-l_{ik}}^{(j_s=j_i+l_s-l_{ik})}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}^{ik}}^{l_s+j_{sa}^{ik}-k} \sum_{j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(j_{ik}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_i=j_{sa}+l_i-l_{sa})}$$

$$\sum_{n_i=n+l_{k_1}}^{(n_i=n+l_{k_1}-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_{k_2}}^{(n_{sa}=n_{ik}+j_{sa}-j_{sa}-l_{k_2})} \sum_{n_s=n_{sa}+j_{sa}-j_i}^{(n_s=n_{sa}+j_{sa}-j_i)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_s - j_i - s - l_{k_1} - l_{k_2})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot l_{k_1} - n_s - j_i - n - l_{k_1} - l_{k_2} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa} - j_{sa} - s \wedge j_{sa}^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik})} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j_s=j_{ik}-l_{ik})}^{(j_s=j_{sa}+l_{ik})} \sum_{(j_i=j_{sa}+l_{ik})}^{(j_i=j_{sa}+l_{ik})} \sum_{(n_{is}=j_{ik}-j_s+1)}^{(n_{is}=j_{ik}-j_s+1)} \sum_{(n_{ik}=j_{ik}+1)}^{(n_{ik}=j_{ik}+1)} \sum_{(n_{sa}+j_{sa}-\mathbb{k}_2)}^{(n_{sa}+j_{sa}-j_i)} \sum_{(n=n-j_{sa}+1)}^{(n=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i(l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k-j_{sa}+1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k}$$

$$\sum_{(n_{sa}=n_{is}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}+j_{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{is} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{j_s=1}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{j_s = j_{ik} - j_{sa}^{ik} + 1}^{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{ik} = l_{sa} + j_{sa}^{ik} - D}^{(j_{ik} = l_{sa} + j_{sa}^{ik} - D)} \sum_{j_i = n + \mathbb{k}}^{(j_i = n + \mathbb{k})} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}^{(n_s = n_{sa} + j^{sa} - j_i)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\sum_{j_s=1}^{j_s=n} \sum_{j_{ik}=j_s}^{j_{ik}=n} \sum_{j_{sa}=j_{ik}-j_s+1}^{j_{sa}=j_{ik}-j_s+1} \sum_{k=1}^{k_1+k_2} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{j_i=j_{sa}+l_i-l_{sa}} \sum_{j_{sa}^i=j_{sa}+l_i-l_{sa}}^{j_{sa}^i=j_{sa}+l_i-l_{sa}} \sum_{j_{sa}^s=j_{sa}+l_i-l_{sa}}^{j_{sa}^s=j_{sa}+l_i-l_{sa}} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{ik}=n+k_2-j_{ik}+1} \sum_{n_{is}=n+k_1-j_s+1}^{n_{is}=n+k_1-j_s+1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}=n-j_{sa}+1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_i=0}^{D+l_s+s} \sum_{j_s=2}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa}=0}^{l_s + j_{sa}^{ik} - k} \sum_{j_{sa}=j_{ik} - j_{sa} - j_{sa}^{ik}}^{(j_{sa} - j_{sa}^{ik})} \sum_{j_i=j^{sa} + l_i - l_{sa}}^{(j_{sa} - j_{sa}^{ik} + 1)} \sum_{n_{is}=n+l_k-j_s+1}^{n} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_{sa}+j^{sa}-j_i}^{n_{ik}+j_{ik}-j^{sa}-l_{k_2}} \sum_{n_{sa}=n-j^{sa}+1} \sum_{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$



$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{s=1}^{D+l_s+s-n} \sum_{k=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k}^{l_{ik}-k+1} \sum_{j_{ik}+j_{sa}-j_s}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_{ik}-j_s+1}^n \sum_{n_{is}=n+l_s-j_s+1}^{n-j_s+1} \sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{n+j_{ik}-j^{sa}-l_{k2}} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{sa}-l_{sa})} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
& \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
& \sum_{(n_{sa}=n-l_{s_2}+1)}^{(n_{sa}=n-l_{s_2}+1)} \sum_{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
& \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{( )} \sum_{(j_s=1)}^{( )}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-i^{l+1})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_{ik}=n+l_k}^{(n_i-i^{l+1})} \sum_{(n_{ik}=n+l_k-1)}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_i-i^{l+1})} \sum_{(n_{sa}=n-j^{sa}+1)}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{( )}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_s+j_{sa}^{ik}-k} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{()} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot (k - j_{sa})!}$$

$$\frac{(j_{sa}^s - s)!}{(l_s - k - 1)!} \cdot \frac{(l_s - j_s - 1)! \cdot (j_s - 1)!}{(D - 1)!} \cdot \frac{(D - 1)!}{(D - j_i - n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$

$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = l_s \wedge l_{sa} + j_{sa} - j_s > l_{ik} \wedge j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - n < l_s \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik}$

$D \geq n \wedge l = k - 1 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_s, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}, \dots, j_{sa}\} \wedge$

$j_s > 5 \wedge j_s = s + k \wedge$

$k_z: z = 2 \wedge k = k_2 \Rightarrow$

$$fz_{S \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDÜŞMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{-1} \sum_{(j_s=2)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \\
 & \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!} \cdot \\
 & \frac{(l_{sa} - l_{ik} - 1)!}{(D + j_{sa} - l_{ik} - 1)! \cdot (n - l_i)!} \cdot \sum_{j_s=1}^{(n-l_i)} \sum_{j_i=1}^{(n-l_i)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa}-l_{ik}+1)} \sum_{j_{sa}=l_{sa}+n-D}^{(n-l_i)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(n-l_i)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+k_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-k_2)} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!} \cdot
 \end{aligned}$$

GÜLDÜZYAZ

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_{ik}-k-j_{sa}^{ik}+2)} \sum_{j_{ik}=j_s+l_{ik}-l_s}^{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{sa}^{sa}+l_i-l_{sa}}^{( )} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1}^{( )} \sum_{(n_{sa}=n_{ik}-j_{sa}^{sa})}^{( )} \sum_{j_{sa}-j_i}^{( )} \frac{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j_{sa} + 2 \cdot \mathbb{k}_1 - j_i - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n - 1 \wedge$

$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j_{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^a = j_i + \dots - s \wedge j_{sa}^{sa} - s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 = \dots + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + j_{sa} - \dots \leq l_{sa} \leq D + l_{ik} + j_{sa} - n - j_{sa}^{ik} \wedge$

$\dots \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$

$s > 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$



$$\begin{aligned}
 f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} &= \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_{sa}+n-D-j_{sa})} \\
 &\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{ik}} \\
 &\frac{(n_{ik}+j_{ik}-l_{ik})! \cdot (n_{sa}-j^{sa}-j_i)!}{(n_{sa}-j^{sa}+1)! \cdot (n_s-n-j_i)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 &\frac{(n_{ik}-n_{sa}-l_{k_2}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}-j^{sa}-l_{k_2})!} \\
 &\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{sa}+j_{sa}^{ik}-l_{ik}-j_{sa})!}{(j_{ik}+l_{sa}-j^{sa}-l_{ik})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \\
 &\sum_{j_{ik}=j_s+l_{ik}-l_s}^{(l_{sa}-k+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa})^{j^{sa} - l_{ik}} \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{l-1} \sum_{(j_s=2)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_s} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

GÜLDEN

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j^{sa} - n - 1)! \cdot (n_s - j_i)!} \cdot \\
 & \frac{(n_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{sa} + j^{sa} - l_{ik} - j^{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (l_{sa} + j^{sa} - j_{ik} - j^{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{( )} \sum_{l=1}^{( )} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{(l_{sa} - i + 1)} \sum_{(j^{sa}=l_{sa}+n-D)} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZ

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(l_{sa} + j_{sa}^{ik} - j^{sa} - l_{ik})! \cdot (j^{sa} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_i=l_{sa}+n-j_{sa}+1}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+l_{ik}-l_{sa}}^{(j_s+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_i}^{(j_s+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_s+1)}$$

$$\sum_{n_i=n+l_{ik}}^{(j_s+1)} \sum_{n_i=n+l_{ik}-j_s}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}}^{(j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}-j_{sa}-l_{k2})}^{(j_s+1)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(j_s+1)}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_s - j_i - s - l_{k1} - l_{k2})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot l_{k1} - n_s - j_i - n - l_{k1} - l_{k2} - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D > n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_i + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = k > 0 \wedge$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{i=2}^{(l_{sa}+n-D-j_{sa}+k)} \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \binom{n}{j_{ik}+1} \binom{n_i-j_s+1}{n_{is}-\mathbb{k}-j_s+1} \binom{n_{is}+j_s-j_{ik}-\mathbb{k}_1}{n_{is}-\mathbb{k}-j_s+1} \binom{n_{ik}+j_{sa}-\mathbb{k}_2}{n_{sa}+j_{sa}-j_i} \binom{n_{sa}+j_{sa}-j_i}{n_{sa}-j_{sa}+1} \binom{n_s-n-j_i+1}{n_s-n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_{ik} - j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
 & \frac{(n_{ik}+j_{ik}-k_1) \cdot (n_{sa}+j_{sa}-j_i)}{(n_{sa}=n_{is}+1) \cdot (n_s=n-j_i)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{ik} - n_{is} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!} \\
 & \frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k-1)} \\
 & \sum_{j_{ik}=l_{sa}+n+j_{sa}^{ik}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-k-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}
 \end{aligned}$$

GÜLDENWALD

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l=1}^{( )}
 \end{aligned}$$

$$\sum_{j_{ik}=l_{sa}+n+j_{sa}^{lk}-D-j_{sa}}^{l_{sa}+j_{sa}^{ik}-l-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \sum_{k=1}^{D+l_s-n-l_i} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{l_{sa}+n-D-j_{sa}+1} \sum_{j_s=j_s+1}^{(n)} \sum_{j_{ik}=j_{ik}+l_{sa}-l_{ik}}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^n \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_s=n_{sa}+j^{sa}-j_i)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$



$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} > l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_s}^{SDOSD} = \sum_{l_i=1}^{D+l_s+s-j_s} \sum_{l_s=2}^{l_i(l_{sa}+n-D-j_s)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+1} \sum_{j_i=l_i-l_{sa}}^{l_i-k+1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-k+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-k_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{l_s - k - 1}{l_{sa} + n - l_{ik} - j_{sa} + 1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}-k+1} \binom{l_{sa} - j_{sa} + 1}{j_{ik} + j_{sa} - j_s - j_{sa}^{ik} + 1} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(l_{sa} - j_{sa} + 1)}$$

$$\sum_{n_i=n+l_{ik}-j_s-1}^n \binom{n - j_s + 1}{n_{ik} = n + l_{k2} - j_{ik} + 1} \sum_{j_{ik}-l_{k1}}^{j_{ik}-l_{k1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k-1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-k+1)} \sum_{(j_{sa}=l_{sa}-l_{sa})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \\
 & \sum_{(n_{ik}+l_{k_2}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \sum_{(j^{sa}-j_i)}^{(j^{sa}-j_i)} \\
 & \sum_{(n_{sa}=n-j_s+1)}^{(n_{sa}=n-j_s+1)} \sum_{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}
 \end{aligned}$$

GÜLDÜŞÜMÜSÜ

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j^{sa}=l_{sa}+n-D)}^{(l_{sa}-i^{l+1})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_{ik}=n+l_k}^{(n_{ik}-i^{l+1})} \sum_{(n_{ik}=n+l_k-1)}$$

$$\sum_{n_{sa}=j_{sa}+1}^{(n_{sa}+j_{sa}-j_i-l_{k_2})} \sum_{(j_i=j_{sa}+l_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik})! \cdot (j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_{sa} + j_{sa}^{ik} - l_{ik} - j_{sa})!}{(j_{ik} + l_{sa} - j^{sa} - l_{ik})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{sa}+n-D-j_{sa}+1)}^{(l_s-k-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

GÜLDENREINER

$$\sum_{n_i=n+k}^n \sum_{(n_{i_s}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_s - j_i - s - k - k_1)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - n_s - j_i - n - k - k_1)! \cdot k - j_{sa}^s}$$

$$\frac{(j_{sa}^s - s)!}{(j_{sa}^s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(D - n)!}{(D - j_i - n)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - 1 \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_i = j_{sa} \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa} - j_{sa} = l_{ik} \wedge l_{sa} + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n \wedge l = k - 0 \wedge$$

$$j_{sa}^s \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^i, \dots, k_1, j_{sa}^{ik}, \dots, j_{sa}^s, \dots, j_{sa}^i\} \wedge$$

$$j_{sa}^i > 5 \wedge j_{sa}^i + s + k \wedge$$

$$k_2: z - 2 \wedge k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s}^{DOSD} (j_{ik}, j^{sa}, j_i) = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\ )} \sum_{j_i=l_{ik}+s+n-D-j_{sa}^{ik}}^{l_s+s-k}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{sa} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n + 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=2}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{j^{sa}=j_i+l_{sa}-l_i}^{( )} \sum_{j_i=l_s+s-k+1}^{l_{ik}+s-k-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{n_{sa}=n-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - l_s - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}}^{( )} \sum_{(j^{sa}=j_i+l_{sa}-l_i)} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-k-j_{sa}^{ik}+1} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\
 & \sum_{(n_{sa}=n-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j^{sa}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - l_i)!} +$$

$$\sum_{j_{ik}=l_{ik}-l_{sa}}^{l_{ik}-l_{sa}} \sum_{j_{sa}=j_{sa}-l_i}^{j_{sa}-l_i} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{l_{ik}+s-i-l-j_{sa}^{ik}+1} \sum_{j_s=1}^{(j_s)} \sum_{j_i=1}^{(j_i)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}+1)}$$

$$\sum_{n_{sa}=n+l_{k_2}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - l_{k_2})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\cdot)} \sum_{j_{ik}=j_{sa}^{sa}+l_{ik}-l_{sa}}^{(\cdot)} \sum_{(j^{sa}=j_i+l_{sa}-l_i)}^{(\cdot)} \sum_{j_i=l_{ik}+n-D-j_{sa}^{ik}}^{l_s+s-k} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-k_1}^{(\cdot)} \sum_{(n_{sa}=n_{ik}-j_s)}^{(\cdot)} \sum_{j^{sa}-j_i}^{(\cdot)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \dots - n_s - j - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot k_1 - \dots - j_i - \dots - k - k - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_i \leq D - n - 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + \dots - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > \dots + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n - l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j^{sa}, j_i}^{DOSD} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})}^{(l_s+j_{sa}-k)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}}$$

$$\sum_{(n_{sa}=n+l_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-j_i)} \sum_{(n_s=n-j_i)}^{n_{sa}-j_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_{ik_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_{sa} - l_{k_2} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - l_{k_2})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j^{sa}+l_{ik}-l_{sa}} \sum_{(j^{sa}=l_s+j_{sa}-k+1)}^{(l_{ik}+j_{sa}-k-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}$$

$$\frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!}$$

$$\frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - j^{s_a} - l_{k_2})!}$$

$$\frac{(n_{s_a} - 1)!}{(j^{s_a} - 1)! \cdot (n_{s_a} + j_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{i_k} - l_s - j_{s_a}^{i_k} + 1)!}{(j_s - j_{i_k} - j_{i_k} - l_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i_l-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{i_k}=j^{s_a}+l_{i_k}-l_{s_a}}^{(l_{i_k}+j_{s_a}-k-j_{s_a}^{i_k}+1)} \sum_{(j^{s_a}=l_{i_k}+n+j_{s_a}-D-j_{s_a}^{i_k})} \sum_{j_i=j^{s_a}+l_i-l_{s_a}}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}}$$

$$\sum_{(n_{s_a}=n-j^{s_a}+1)}^{(n_{i_k}+j_{i_k}-j^{s_a}-l_{k_2})} \sum_{n_s=n-j_i+1}^{n_{s_a}+j^{s_a}-j_i}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - n - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(j_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s) \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=l}^{( )} \sum_{j_s=1}^{( )} \\
 & \sum_{j_{sa}=j^{sa}+l_{ik}-l_{sa}}^{(l_{ik}+j_{sa}-l-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+l_i-l_{sa}}^{(j_{sa}=l_{ik}+n+j_{sa}-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}+1)} \\
 & \sum_{n_{sa}=n+\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{sa}+j^{sa}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{D+l_s+s-j_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_i=j_{sa}+l_{ik}-l_{sa}-j_s+1}^{j_i=j_{sa}+l_{ik}-l_{sa}-j_s+1} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_s=j_{ik}-j_{sa}^{ik}} \sum_{j_{ik}=n_{is}+j_s-j_{ik}-k_1}^{j_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2}^{n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i}^{n_s=n_{sa}+j_{sa}^{ik}-j_i}$$

$$\sum_{n+k}^{n+k} \sum_{(n_{is}=n_{is}+j_s+1)}^{(n_{is}=n_{is}+j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1}^{n_{ik}=n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)}^{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-k_2)} \sum_{n_s=n_{sa}+j_{sa}^{ik}-j_i}^{n_s=n_{sa}+j_{sa}^{ik}-j_i}$$

$$\frac{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot k_1 - n_s - j_s - j_i - s - k - k)!}{(2 \cdot n_{sa} + 2 \cdot j_{sa}^{ik} + 2 \cdot k_1 - n_s - j_i - n - k - k - j_{sa}^s)!}$$

$$\frac{1}{(n + j_{sa}^s - j_s - s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_{sa}, j_i}^{DOSD} = \sum_{l_i = 2}^{D+l_s+s-n-l_{ik}-j_{sa}^{ik}+1} \sum_{j_{sa}^{ik}=2}^{l_s+j_{sa}^{ik}-k} \sum_{j_{ik}=l_{ik}+n}^{l_{ik}+l_{sa}-l_{ik}} \sum_{j_{sa}^i=j_{sa}^i+l_i-l_{sa}}^{j_{sa}^i+l_i-l_{sa}} \sum_{n_i=n+l_{ik}-j_{sa}+1}^n \sum_{n_{is}=n+l_{ik}-j_{sa}+1}^{n-j_s+1} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=n-j_{sa}+1}^{n_{sa}+j_{sa}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j_{sa} - 1)! \cdot (n_{sa} + j_{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k} \\
 & \frac{(n_{ik}+j_{ik}-k_1) \cdot (n_{sa}-j^{sa}-j_i)}{(n_{sa}-j^{sa}+1) \cdot (n_s-n-j_i)} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \\
 & \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})}^{( )} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n - j_i + 1}^{n_{sa} + j^{sa} - j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j_i - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - j_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{( )} \sum_{l=1}^{( )}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik} = l_{ik} + n - D}^{l_{ik} - l + 1} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + l_i - l_{sa}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)}
 \end{aligned}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{sa}^{ik} - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_{sa}^{ik} - k)} \sum_{(j_{ik} = l_{ik} + j_{sa}^{ik} - k)} \sum_{(j_i = j_{sa} + l_i - l_{sa})} \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)} \sum_{(n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_s = n_{sa} + j^{sa} - j_i)} \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j^{sa} = j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_{sa} + j_{sa}^{ik} - j_{sa} = l_{ik} \wedge l_i + j_{sa} - s = l_{sa} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}, \dots, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} f_{z \Rightarrow j_s, j_{sa}, j_i}^{DO} &= \sum_{j_s=1}^{D-n-l_i} \sum_{j_{sa}=1}^{n-l_i-j_s} \sum_{j_i=1}^{n-D-j_{sa}^{ik}} \\ & \sum_{j_{ik}=j_s+n-D}^{l_{ik}-k+1} \sum_{j_{sa}=j_{ik}+l_{sa}-l_{ik}}^{(j_{sa}^{ik}-j_{sa}+1)} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_i-j_s+1)} \\ & \sum_{i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(l_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \\ & \sum_{(n_{sa}=n-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}-j_i} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\ & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \frac{(l_s - k + 1)!}{(l_{ik} + n - j_{sa}^{ik} + 1)!} \cdot \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}}^{l_{ik}-k+1} \sum_{n_{sa}=j_{ik}+l_{sa}-j_{ik}}^{(j_{ik}-j_s+1)-j_{sa}^{ik}} \sum_{j_i=j_{sa}+l_i-l_{sa}}^{(j_{ik}-k_1)-j_{sa}^{ik}} \\
 & \sum_{n_i=n+l_{ik}-j_{ik}}^n \sum_{n_{is}=n+k_1-1}^{n-j_s+1} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n-j_s+1} \sum_{n_{sa}+j_{ik}-j_{sa}^{ik}-k_2}^{n_{sa}+j_{sa}^{ik}-j_i} \\
 & \sum_{n_{sa}=n-j_{sa}^{ik}+1}^{n_{sa}+j_{sa}^{ik}-j_i} \sum_{n_s=n-j_i+1}^{n_{sa}+j_{sa}^{ik}-j_i} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1}$$

$$\sum_{(n_{sa}=n_{sa}+1)}^{(n_{ik}+j_{ik}-k_1)} \sum_{(n_s=n-j_i)}^{(n_{sa}-j^{sa}-j_i)}$$

$$\frac{(n_i - n_{sa} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - k_2)!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(n_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=l}^{( )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-l+1} \sum_{(j^{sa}=j_{ik}+l_{sa}-l_{ik})} \sum_{j_i=j^{sa}+l_i-l_{sa}}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k} - j_{ik} + 1)}^{(n_i - j_{ik} + 1)} \\
 & \sum_{n_{sa} = n + \mathbb{k}_2 - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{sa} + j^{sa} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{sa}^{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{( )} \sum_{(j^{sa} = j_{ik} + l_{sa} - l_{ik})}^{( )} \sum_{j_i = j^{sa} + l_i - l_{sa}}^{( )} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \\
 & \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{( )} \sum_{n_s = n_{sa} + j^{sa} - j_i} \\
 & \frac{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_s - j_i - s - \mathbb{k} - \mathbb{k})!}{(2 \cdot n_{sa} + 2 \cdot j^{sa} + 2 \cdot \mathbb{k}_1 - n_s - j_i - n - \mathbb{k} - \mathbb{k} - j_{sa}^s)!} \cdot \\
 & \frac{1}{(n + j_{sa}^s - j_s - s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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## DİZİN

## B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.2/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.3.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/2
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/228
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.2/203
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2/228

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.3/103
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3/228
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.2/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.2/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.2/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.3/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.3/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.3/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.1/207
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.2.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.1.3.1/207

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/236

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/296-297

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.1.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.2.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.1.6.3.1/3

toplam düzgün simetrik olasılık, 2.3.1.2.1.6.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin durumuna bağlı

simetrik olasılık, 2.3.1.1.1.1.1.1/105

toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1.1/85

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.1.1/150-151

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.1.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.2.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.1.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.1.3.1/4



toplam düzgün simetrik olasılık, 2.3.1.2.2.1.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.2.2.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.2.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.2.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.2.2.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.2.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.2.3.1/3-4

toplam düzgün simetrik olasılık, 2.3.1.2.2.2.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.1.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.4.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.2.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.4.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.4.3.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.4.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.6.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.2.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.6.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.6.3.1/4

toplam düzgün simetrik olasılık, 2.3.1.2.2.6.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.2.7.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.2.7.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.2.1/5

toplam düzgün simetrik olasılık,  
2.3.1.2.2.7.2.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.2.7.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk ve son durumunun  
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.2.7.3.1/3-4

toplam düzgün simetrik olasılık,  
2.3.1.2.2.7.3.1/3-4

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.2.7.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
ve herhangi bir durumunun bulunabileceği  
olaylara göre

simetrik olasılık, 2.3.1.1.3.1.1.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.3.1.1.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.2.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.3.1.2.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.1.3.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.3.1.3.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk ve herhangi bir durumunun  
bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.1.1/5

toplam düzgün simetrik olasılık,  
2.3.1.2.3.2.1.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.2.1/5

toplam düzgün simetrik olasılık,  
2.3.1.2.3.2.2.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk ve herhangi bir  
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.3.2.3.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.3.2.3.1/3-4

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.3.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin  
herhangi bir durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.1.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.4.1.1.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.4.1.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.2.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.4.1.2.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.4.1.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin herhangi iki durumuna bağlı

simetrik olasılık, 2.3.1.1.4.1.3.1/4

toplam düzgün simetrik olasılık,  
2.3.1.2.4.1.3.1/3

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.4.1.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin her  
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.1.1/838

simetrik olasılık, 2.3.1.1.4.1.1.1/838

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız

simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.2.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin her durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.3.1/838

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.1.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.2.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.1.3.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.5.1.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.1.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.1.1/6  
toplam düzgün simetrik olasılık, 2.3.1.2.5.2.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.2.1/6

toplam düzgün simetrik olasılık, 2.3.1.2.5.2.2.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.5.2.3.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.5.2.3.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.1.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.2.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.3.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.1.1/12  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.2.1/12  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.3.1/8  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.1.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.2.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.3.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.1.1/6  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.1.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu

bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.2.1/6  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.3.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.3.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.1.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.1.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.2.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.2.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.3.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.3.1/3-4  
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.1.1/4-5  
 toplam düzgün simetrik olasılık, 2.3.1.2.6.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.2.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.3.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.1.1/6  
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.2.1/6  
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.3.1/4-5  
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun

bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.1.1.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.1.3.1/7-8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.1.1/12  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.2.1/12  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.3.1/8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.3.1/8  
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.9.4.1.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.4.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bir bağımsız durumlu  
 bağımsız simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.2.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.4.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bir bağımsız durumlu  
 bağımlı simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.3.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.4.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bağımsız durumlu  
 simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.4.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.4.4.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bağımsız durumlu  
 bağımsız simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.2.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.6.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bağımsız durumlu  
 bağımlı simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.3.1/7-8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.6.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımsız-bağımsız durumlu  
 simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.1.1/12

toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.7.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımsız-bağımsız durumlu  
 bağımsız simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.2.1/12  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.7.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımsız-bağımsız durumlu  
 bağımlı simetrisinin ilk herhangi bir ve son  
 durumunun bulunabileceği olaylara göre  
 herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.3.1/8  
 toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.9.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı-bağımsız durumlu  
 simetrisinin ilk herhangi bir ve son durumunun  
 bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.1.1/5  
 toplam düzgün simetrik olasılık,  
 2.3.1.2.7.1.1.1/3-4

toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.7.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı durumlu bağımsız  
 simetrisinin ilk herhangi iki ve son  
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.2.1/5  
 toplam düzgün simetrik olasılık,  
 2.3.1.2.7.1.2.1/3-4

toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.7.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımlı durumlu bağımlı  
 simetrisinin ilk herhangi iki ve son  
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.3.1/5  
 toplam düzgün simetrik olasılık,  
 2.3.1.2.7.1.3.1/3-4

toplam düzgün olmayan simetrik  
 olasılık, 2.3.1.3.7.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
 dizilimsiz bağımsız-bağımlı durumlu  
 simetrisinin ilk herhangi iki ve son  
 durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.1.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.2.2.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.2.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.2.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.6.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.6.2.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.6.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.1.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.7.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.2.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.7.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.3.1/5

toplam düzgün simetrik olasılık,  
2.3.1.2.7.7.3.1/3-4

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.7.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
herhangi iki ve son durumunun  
bulunabileceği olaylara göre herhangi bir  
ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.1.1.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.1.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.1.2.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.1.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımlı  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.1.3.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.1.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.2.1.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.2.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.2.2.1/22

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.2.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.2.3.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.2.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.4.1.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.4.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.4.2.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.4.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.4.3.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.4.3.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.10.6.1.1/12-13

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.6.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı



simetrik olasılık,  
2.3.1.1.10.6.2.1/12-13  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.6.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.10.6.3.1/12-13  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.6.3.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.10.7.1.1/22  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.7.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.10.7.2.1/22  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.7.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumlu  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi bir ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.10.7.3.1/12-13  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.10.7.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu simetrisinin ilk  
herhangi iki ve son durumunun  
bulunabileceği olaylara göre herhangi iki  
ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.1.1.1/16  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.1.1.1/17

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.1.2.1/16  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.1.2.1/17

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı durumlu bağımsız  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.1.3.1/16  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.1.3.1/17

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.2.1.1/29  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.2.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.2.2.1/29  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.2.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımlı durumlu  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı  
simetrik olasılık,  
2.3.1.1.11.2.3.1/16  
toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.2.3.1/17

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumlu  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.4.1.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.4.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumda  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.4.2.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.4.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bir bağımsız durumda  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.4.3.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.4.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumda  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.6.1.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.6.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumda  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.6.2.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.6.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımlı-bağımsız durumda  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.6.3.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.6.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumda  
simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.7.1.1/29

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.7.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumda  
bağımsız simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.7.2.1/29

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.7.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı  
dizilimsiz bağımsız-bağımsız durumda  
bağımlı simetrisinin ilk herhangi iki ve son  
durumunun bulunabileceği olaylara göre  
herhangi iki ve son durumuna bağlı

simetrik olasılık,  
2.3.1.1.11.7.3.1/16

toplam düzgün olmayan simetrik  
olasılık, 2.3.1.3.11.7.3.1/17

VDOİHİ'de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ'de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlarında, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu olasılığının ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

**GÜLDÜNYA**