

VDOİHİ

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

Cilt 2.3.1.3.9.1.1.14

İsmail YILMAZ

Matematik / İstatistik / Olasılık

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VDOİHİ 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 toplam düzgün olmayan simetrik olasılık Cilt 2.3.1.3.9.1.1.14

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Dili: Türkçe + Matematik Mantık



K. Atatürk

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100. Yılı Anısına

DÜZELTME

Bu cilt için

$$fz \overset{S}{\Rightarrow} j_s, j_{ik}, j_i$$

simgesi yerine

$$fz \overset{DOSD}{\Rightarrow} j_s, j_{ik}, j_i$$

simgesi olmalı.

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.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

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GÜLDÜNYA

Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

l : bağımsız durum sayısı

I : 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_i : 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

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

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

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$f_{z,0}S_{j_s,j_{ik},j}^{sa,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı

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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

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

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

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

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

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${}^0 S_{j_s, j_{ik}, j^{sa}, j_i}^{DOSD}$: 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

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

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

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

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

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

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

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

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimsiz dağılımlarda simetrisinin ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu hariç olmak üzere dağılımının 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 bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + k \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\cdot)}$$

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \dots \wedge$$

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

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

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

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

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

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

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{j_s=n-D}^{k-j_{sa}^{ik}+1} \right) \cdot \\
& \frac{j_i - l_{ik} - s - 1}{(l_s + s)!} \cdot \sum_{i=l_{ik}+n}^{j_i=l_i+n-D} \\
& \sum_{n_i=0}^n \sum_{n_{is}=n+l_k-j_s+1} \\
& \sum_{n_{ik_2}=j_{ik}+1}^{n_{is}+j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(D + j_{ik} - n - l_i)! \cdot (j_i - j_{ik} - 1)!} + \\
& \sum_{k=0}^{D+l_s+j_{ik}-l_i} \sum_{l=0}^{(l_s-k+1)} \sum_{m=0}^{(l_s+n-D)} \sum_{j_{ik}+j_{sa}^{lk}-s+1}^{(j_{ik}+j_{sa}^{lk}-k+1)} \sum_{j_i=j_{ik}+s-j_{sa}^{lk}}^{(j_i)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

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

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

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_z = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

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

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

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

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

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=D+l_s+s-j_i+1}^{D-n+1} \sum_{j_s=k+1}^{l_s-k+1} \sum_{j_{sa}^{ik}=j_s+1}^{j_s+l_s-k+1} \sum_{j_{ik}=j_{ik}+s-j_{sa}^{ik}}^{j_s+l_s-k+1} \sum_{j_{is}=n+l_k-j_s+1}^{n+l_k-j_s+1} \sum_{j_{ik_1}=j_{ik}-k_1}^{n_{is}-j_{ik}-k_1} \sum_{j_{ik_2}=j_{ik}+1}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + k \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

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

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

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

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

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

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

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

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

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

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

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

$s = 3 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

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

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

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

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

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

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

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

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

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

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

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

$$D > n \wedge I = l_k \geq 0 \wedge$$

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

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

$$s = 3 \wedge s = s + l_k \wedge$$

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

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik_2}+1}^{n_{is}+j_s-j_{ik_2}-1} \sum_{(n_s=n-j_i+l_{k_2})}^{(n_{ik_2}-j_{ik_2}+1)}$$

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

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

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + k \wedge$$

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

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{l_i=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_s}^{(D-j_{sa}^{ik})} \sum_{l_{ik}=l_i}^{l_{ik}-k} \sum_{j_{sa}^{ik}=l_{ik}+n}^{(n-j_{sa}^{ik})} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n) \vee$$

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{l_i} \sum_{s=2}^{(l_s - k + 1)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$j_{ik} = j_i + \dots - s \wedge$

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

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

$\dots < D - \dots - n \wedge$

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜNYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜZYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDÜSÜZ

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

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

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

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

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

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

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

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

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

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

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

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

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

$$D > n < n \wedge l = l_{ik} = 0 \wedge$$

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

$$s: (j_{sa}^s, k_1, j_{sa}^{ik}, j_i)$$

$$s = 3 \wedge j_{sa}^s = s + k \wedge$$

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

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

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

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

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

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

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

$$\frac{(n_s-n_s-1)!}{(j_i-1)! \cdot (l_k+j_{ik}-n_s-j_i)!}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1}^{(n_s = n_{ik} + j_{ik} - j_i - k_2)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

$$\frac{(n_{is}-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!}$$

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

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

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

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

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

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

GÜLDÜZÜMÜSÜ

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

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

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

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

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

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

$$\sum_{j_{ik}=l_{ik}-k_1+1}^{l_{ik}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{l_i+1}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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$$\begin{aligned}
& \sum_{n_{ik}=n+l_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_i)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_i - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{()} \sum_{l(j_s=1)}^{()} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-l+1)} \sum_{(j_i=l_i+n-D)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_2-j_{ik}+1)}^{(n_i-j_{ik}-l_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

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

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

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

$$\sum_{(j_s=j_i+j_{sa}^s, \dots)}$$

$$\sum_{(n_i-j_s+1, \dots)}$$

$$\sum_{(n_{ik}=n_{is}, \dots)}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+l_1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_1-j_i-l_{k_2})}^{(\quad)}$$

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

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

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

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

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

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

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

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

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

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

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

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

$s = s \wedge l_{k_1} = s + l_{k_1} \wedge$

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

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

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

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

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

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

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

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

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

$$\sum_{n_i=n+l_{ik_1}+j_{ik_1}-l_{ik_1}+1}^{n} \sum_{n_i=n+l_{ik_2}+j_{ik_2}-l_{ik_2}+1}^{n} \sum_{n_s=n-j_i+1}^{(n_i - l_{ik_1} - j_{ik_1} - l_{ik_2} - j_{ik_2})}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GÜLDEN

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

$$D = n - s - n - l_i$$

$$\sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Sigma}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik}=l_i+n_{is}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \binom{j_{ik}}{j_{sa}^{ik}}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{K}$$

$$\mathbb{K} = 2 \wedge \mathbb{K} = \mathbb{K}_1 + \mathbb{K}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

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

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

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

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

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

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

GÜLDENWA

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

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

GÜLDENREINER

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

GÜLDÜZYA

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

GÜLDÜSÜZ

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

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

$$\sum_{j_{ik}=n_i+l_k}^{n_i+l_k} \binom{n_i+l_k}{j_{ik}} \sum_{j_s=j_{ik}+j_{sa}^{ik}+1}^{l_s+l_i-k} \binom{l_s+l_i-k}{j_s} \sum_{j_i=j_{ik}-s}^{j_{ik}-s} \binom{j_{ik}-s}{j_i} \sum_{j_{sa}^{ik}=n_i+l_k+j_{sa}^{ik}-k}^{n_i+l_k+j_{sa}^{ik}-k} \binom{n_i+l_k+j_{sa}^{ik}-k}{j_{sa}^{ik}}$$

$$\sum_{j_{ik}=n_i+l_k}^{n_i+l_k} \binom{n_i+l_k}{j_{ik}} \sum_{j_s=j_{ik}+j_{sa}^{ik}+1}^{l_s+l_i-k} \binom{l_s+l_i-k}{j_s} \sum_{j_i=j_{ik}-s}^{j_{ik}-s} \binom{j_{ik}-s}{j_i} \sum_{j_{sa}^{ik}=n_i+l_k+j_{sa}^{ik}-k}^{n_i+l_k+j_{sa}^{ik}-k} \binom{n_i+l_k+j_{sa}^{ik}-k}{j_{sa}^{ik}}$$

$$\frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i + n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + k \wedge$$

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

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

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

GÜLDÜNYA

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

GÜLDÜZMAYA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{n_i=n+l_k}^{(n_i - n_{ik} - k - l_{k1} + 1)} \sum_{(n_{ik}=n+l_{k2}-j_{ik}+1)}^{n_{ik}+j_{ik}-j_i-l_{k2}} \sum_{n_s=n-j_i+1} \dots$$

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

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

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

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

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

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

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

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

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

$$\frac{(n_i+j_s-j_i-l_{k_1}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+l_s-n-l_i)!}{(D+l_s-n-l_i)! \cdot (n-j_i)!}$$

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

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

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

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

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

$$D > n < n \wedge l_s = l_k > = l_{k_1} \wedge$$

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

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

$$s = 3 \wedge s = l_k \wedge$$

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

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

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

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

GÜLDÜSÜZ

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(j_s=j_i+l_{ik}, \dots)}$$

$$\sum_{(n+l_{ik}, \dots)}$$

$$\sum_{(n_{ik}=n_{is}, \dots)}$$

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

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

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

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

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

$$j_{ik} = j_i + j_s - s \wedge$$

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

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

$$n - l_i = I = \mathbb{k} \geq 0 \wedge$$

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

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

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

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

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

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

$$\frac{\binom{n}{n_i=n+l_i} \binom{n+l_i}{n+l_i-j_s+1}}{\binom{n_i+j_s-j_{ik}}{j_i=j_{ik}+l_i-l_{ik}} \binom{(n_{ik}+j_{ik}-j_{ik})}{j_i=j_{ik}+l_i-l_{ik}}}$$

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

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

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

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

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

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

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

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

GÜLDÜMÜŞA

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

GÜLDÜSÜZ

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

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

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

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

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

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

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

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

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S \Rightarrow j_s, j_{ik}, j_i = \sum_{k=0}^{l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_i=j_{ik}+l_i-l_{ik})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{(n_{is}=n_{ik}+j_s-j_{ik}-1)}^n \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{(n_{ik}+1)} \\
 & \frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-l_{ik})!}{(n_{ik}+l_{k2}-j_{ik}-1)! \cdot (n_{ik}-j_i+1)!} \\
 & \frac{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}{(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-1)!}{(n_{ik}-n_s-1)!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i - k - 1)!} \cdot \\
 & \frac{(n_i - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n_i + l_{k_1} - j_{i_s} - n - l_i - 1)! \cdot (j_{ik} - j_s - j_{i_s}^k + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{i_s}^k-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{i_s}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{i_s}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S \Rightarrow j_s, j_{ik}, j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
& \sum_{k=0}^{D+l_s+j_i-n-l_i} \sum_{l=0}^{(l_s-k+1)} \sum_{m=0}^{(l_i+n-D)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-k_2} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(n_{is} - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_s = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \mathbb{k}_2, j_{sa}^i\}$

$s = 3 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
& \sum_{n_i=\mathbf{n}+\mathbf{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbf{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbf{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbf{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
& \sum_{j_i = n + l_s + s - k + 1}^{D - n + l_s + s - k + 1} \sum_{j_{ik} = l_s + n - D}^{(l_s - k + 1)} \binom{l_s - k + 1}{j_i - j_{ik} - l_i} \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{(n_i=n_i+1)}^{()} \sum_{(n+l_k)}^{()} \sum_{(n_{ik}=n_{is}+l_{ik}-k_1)}^{()} \sum_{(j_i=j_i-k_2)}^{()} \frac{(n_i - j_s - j_i - l_i - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (j_s + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > l_i - n \wedge I = k \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik} - 1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+1)}^{(n_i+j_{ik}-l_{ik_2})} \\
 &\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_i - n_s - 1)!}{(n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=D+l_s+s-\mathbf{n}-l_i+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(j_{ik}-j_s-j_{sa}^{ik}+1)} \sum_{j_i=j_s+j_{sa}^{ik}-1}^{(j_i=j_{ik}+l_i-l_{ik})} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{()} \\
& \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_i} = \sum_{k=1}^{l-1} \binom{j_{sa}^{ik}+1}{j_s} \binom{l-s-k}{j_{sa}^{ik}+1} \binom{n_i-j_s+1}{n_i+n+k} \binom{n_{is}+j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j_i-k_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - k + 1)} \sum_{(j_i=l_s+s-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{is}+j_{ik}-l_i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_s - n_s - 1)!}{(n_s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - i^{l+1})} \sum_{(j_i=s)}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_2})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{l-1} \sum_{\substack{(\quad) \\ (j_s=j_{ik}-j_{sa}^k+1)}} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\substack{(l_s+s-k) \\ (j_i=s+1)}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_s+1) \\ (n_{is}=n+l_k-j_s+1)}} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\substack{(\quad) \\ (n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{l-1} \sum_{\substack{(\quad) \\ (j_s=1)}}
 \end{aligned}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_s=n_{ik}+j_{ik}-j_i)} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik}\} \wedge$$

$$s \geq 3 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=0}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j_s=1}^{()} \sum_{k=j_{sa}^{ik}}^{()} \sum_{j_i=j_{ik}+l_i-l_{ik}}^{()} \sum_{n_i=n+l_k}^{(n_i=n+l_k-l_{k_1}+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{()} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{()}$$

GÜLDÜMNA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}
 \end{aligned}$$

$$D \geq n < n+l_s \wedge l_s \leq D-n+1 \wedge$$

$$1-j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge$$

$$j_{ik}=j_i+j_{sa}^{ik}-s \wedge$$

$$j_{ik}+s-j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik}-j_{sa}^{ik}+1 > l_s \wedge l_i+j_{sa}^{ik}-s=l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

GÜLDÜMVA

$$fz^S \Rightarrow i \sum_{k=1}^{l-1} j_{ik} j_i \sum_{k=1}^{l-k+1} \binom{l-k+1}{k} \sum_{j_s=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-1} \binom{l_i+j_{sa}^{ik}-k-1}{j_s+j_{sa}^{ik}-1} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \binom{n_i-j_s+1}{n_i=n+\mathbb{k}} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1} \binom{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜZ

$$\begin{aligned}
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-1)!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_i+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_{ik}-j_i-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_i-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!}
 \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)} \sum_{l_i=s}^{(j_s)} \sum_{n_i=n+k}^n \sum_{n_s=n+l_i-j_i-k_2}^{(j_s-j_i-k_1+1)} \frac{(n_i - n - k_2)! \cdot (n + j_s - j_i - k_1 - k_2)!}{(n - n - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} -$
- $j_{ik} + s - j_{sa}^{ik} < j_i \leq n$
- $l_{ik} - j_{sa}^{ik} + 1 > l_i + j_{sa}^{ik} - s = k \wedge$
- $D + s - n < l_i \leq D + s - n - 1 \wedge$
- $D \geq n < n - l_i = k \Rightarrow$
- $j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, k_1, k_2, j_{sa}^i\} \wedge$
- $j_{sa}^s = s + k \wedge$
- $k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_i-l_{k_1}+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s)!}{(j_i+l_{k_1}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_i-1)!}{(n_s+n_j-i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=0}^{l_i} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i-k+1)} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{(l_i=1)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{(j_{ik}=j_i+l_{ik})} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+l_{ik}} \sum_{n_i=n+l_{ik}-j_i+1} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_{ik}}^n \sum_{(n_{is}=n+l_{ik}-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜNYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!} \cdot \frac{(D - \dots)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - \dots$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

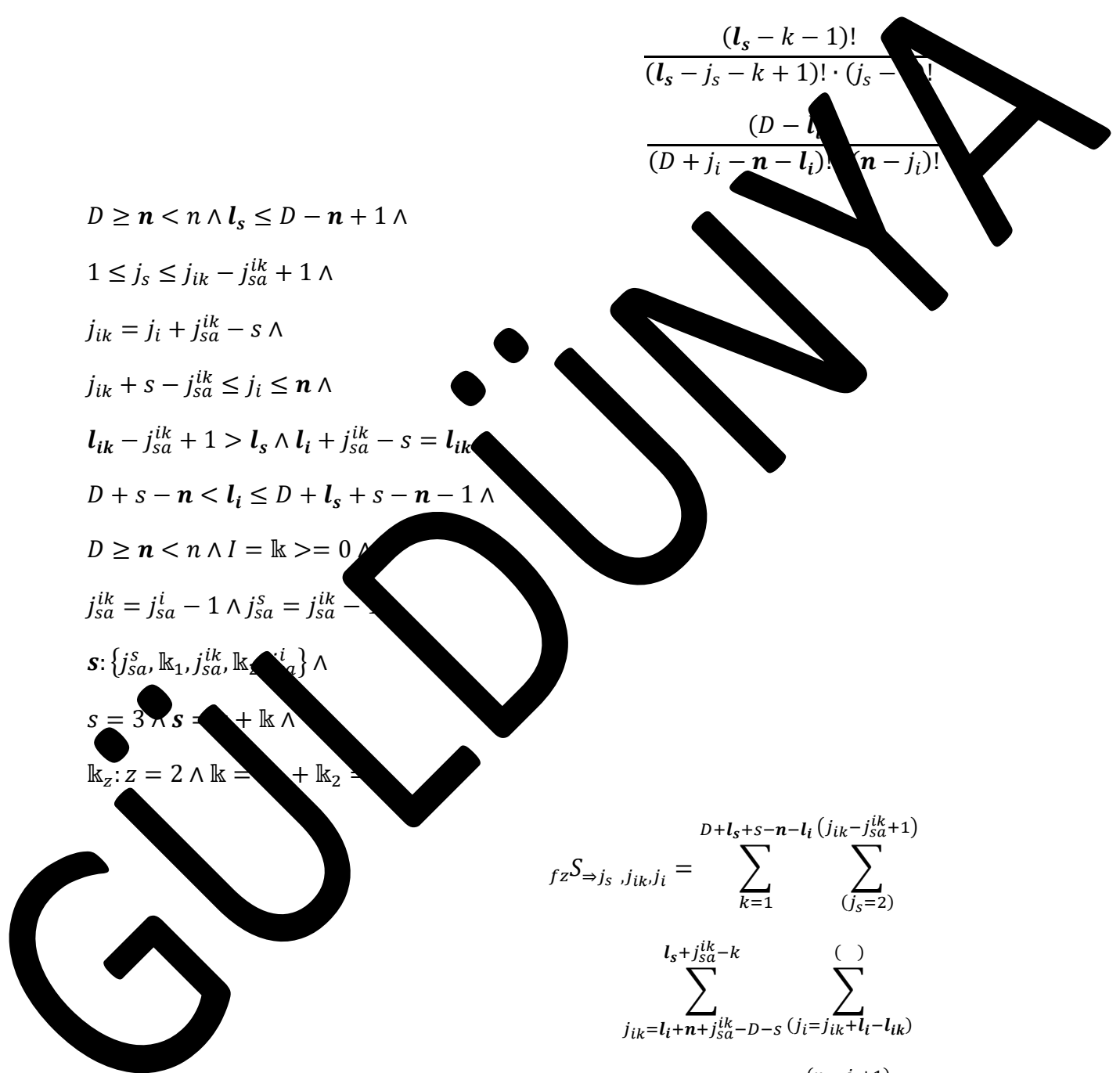
$s = 3 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 =$

$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$

$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$

$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$



$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_{sa} + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
 & \sum_{j_{ik}=l_i}^{l_i + j_{sa}^{ik} - 1} \sum_{j_s=2}^{l_s - k + 1} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n+k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_i-j_{k_2})}$$

$$\frac{(n_i - n_{k_1} - 1)!}{(j_{k_1} - 1)! \cdot (n_i - n_{k_1} - j_{ik} + 1)!}$$

$$\frac{(n_i - n_s - 1)!}{(j_i - j_{k_2} - 1)! \cdot (n_i - n_s - j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

GÜLDÜZYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - l_{ik} + 1)!} \cdot$$

$$\frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot$$

$$D_{s-n-l_i}^{(k)} \cdot$$

$$\sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Sigma}$$

$$l_i^{i_{ik}-k-s+1} \sum_{i_{ik}=j_s+j_{sa}^{ik}-1}^{()} \sum_{(j_i=j_{ik}+l_i-l_{ik})}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

GÜLDÜMNA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{is}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \dots$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{k_1} - l_{k_2} - j_{ik} - 1)!}{(l_{k_1} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \binom{(\quad)}{\quad} (j_i=j_{ik}+l_i-l_{ik}) \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(\quad)}{\quad} (n_s=n_{ik}+j_{ik}-j_i-l_{k_2}) \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜM

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s} \sum_{(j_s=2)}^{n-l_i(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n+l_i+l_s-k+1} \sum_{j_s=2}^{l_s-k+1} \\
& \frac{(l_{ik} + j_s - 1)!}{(j_i + l_{ik} - l_i - j_s + 1)! \cdot (l_s + s - k + 1)!} \cdot \\
& \sum_{j_s=2}^{j_s+1} \frac{(n_{is} + k - 1)!}{(n_{is} = n + k - j_s + 1)!} \cdot \\
& \frac{(n_{ik} - j_{ik} - k_1 - 1)! \cdot (n_{ik} + j_{ik} - j_i - k_2)!}{(n_{ik} = 1 - j_{ik} + 1)! \cdot (n_s = n - j_i + 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_{ik}-k_1-j_{ik}-k_2)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{is}-n_s-1)!}{(n_{is}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()} l$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-i^{l-1}-j_{sa}^{ik}+1)}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa})!}{(l_{ik} - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - l_k)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{j_s=j_{ik}-j_{sa}^k+1}^{(j_s)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-k)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(j_s)} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_s)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z = \sum_{k=1}^{s-n-j_{ik}-j_i} \sum_{(j_s=2)}^{j_{ik}-j_{sa}^{ik}+1} \sum_{l_i=l_{ik}+n-D}^{l_s+j_{sa}^{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$D + l_s + s - n - l_i \quad (l_s - k + 1)$$

$$\sum_{k=1} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+l_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_{ik}=l_s+l_{sa}^{ik}-k+1)}^{(n_i - j_s + 1)}$$

$$(n_i - j_s + 1)$$

$$\sum_{n+l_k}^{(n_i - j_s + 1)} \sum_{(n+l_k - j_s + 1)}$$

$$n_{is} + j_{ik} - k_1 \quad (n_i - k_1)$$

$$\sum_{n+l_k - j_{ik}}^{(n_i - k_1)} \sum_{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$(n_{is} - n_{ik} - 1)!$$

$$(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!$$

$$(n_{ik} - n_s - 1)!$$

$$(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_s - k - 1)!$$

$$(l_s - j_s - k + 1)! \cdot (j_s - 2)!$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)! +$$

$$i-1 \quad (l_s - k + 1)$$

$$\sum_{k=D+l_s+s-n-l_i+1} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_s - n_s)!}{(j_i - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{D+l_s+s-j_i} \binom{D+l_s+s-j_i-k}{j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j_i+n-D}^{j_{ik}^{ik}-k} \binom{j_{ik}^{ik}-k}{j_i=j_{ik}+l_i-l_{ik}}$$

$$\sum_{n_i=n+l_k}^{n_i} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_i-j_s+1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}^{(n_i-j_s+1)}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(l_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l_i - n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} \geq 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s = 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=0}^{D+l_s+s-n-l_i} \sum_{(j_s-2)}^{n-D-j_{sa}^{ik}} \sum_{i_{ik}=l_{ik}+n-k+1}^{i_{ik}=j_{ik}+l_i-l_{ik}} \sum_{i_s=0}^{n-l_i-l_s+1} \sum_{n_{is}=n+\mathbb{k}}^{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_2} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i-1)}^{(n_i+j_{ik}-l_{ik_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_i - n_s - 1)!}{(n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{\binom{D}{l}} \sum_{j_s=1}^{\binom{D}{l}} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{D}{l}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_i+l_{ik}-l_{ik})} \sum_{(n_i+l_{ik}-k+1)}^{(n_i+l_{ik}-k+1)} \sum_{(n_i+l_{ik}-k+1)}^{(n_i+l_{ik}-k+1)} \frac{(n_i+l_{ik}-j_i-l_{ik}-k_2-j_{sa}^s)!}{(n_i-n-k_2+l_{ik})! \cdot (j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > l_i - n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^{\mathcal{S}} \Rightarrow j_s, j_{ik}, j_i} = & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-}^{(n_{is}+j_s-j_{ik}-)} \sum_{(n_s=n-j_i-)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_s - n_s - 1)!}{(n_s - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + \mathbf{n} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-\mathbf{n}-l_i+1}^{D-\mathbf{n}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+\mathbf{n}-D)}^{(l_i-k+1)} \\
& \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
\end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-j_i} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(j_{ik} - j_s - j_{sa}^{ik} + 1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{j_i=l_i+n-D}^{(n_i-j_s+1)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n > n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{sa}^{ik}-k-j_{sa}^{ik}+1)}^{k-j_{sa}^{ik}+1} \sum_{(l_s=j_{sa}^{ik}-k-j_{sa}^{ik}+1)}^{l_s+j_{sa}^{ik}-k-j_{sa}^{ik}+1} \sum_{(j_i=j_{sa}^{ik}-k-j_{sa}^{ik}+1)}^{j_i+j_{sa}^{ik}-k-j_{sa}^{ik}+1} \sum_{(i=l_i+n-D)}^{i=l_i+n-D} \sum_{n_i=j_{sa}^{ik}-k-j_{sa}^{ik}+1}^{n_i=n+\mathbb{k}-j_s+1} \sum_{n_{is}=j_{sa}^{ik}-k-j_{sa}^{ik}+1}^{n_{is}=n+\mathbb{k}-j_s+1} \sum_{n_{ik}=j_{sa}^{ik}-k-j_{sa}^{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}-1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-k_2)} \\
 & \frac{(n-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s-1)!} \\
 & \frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n-n_s-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \left(\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \right)
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
& \frac{(n_s - j_i - n - l_{k_1} - 1)!}{(n_s - j_i - n - l_{k_1} - j_i)!} \cdot \\
& \frac{(n_s - j_s - n - l_{k_1} - 1)! \cdot (j_s - 2)!}{(n_s - j_i - n - l_{k_1} - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
& \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
& \sum_{k=D+l_{ik}}^{D-n+1} \sum_{j_{ik}=l_{ik}+n-D}^{l_s-k+1} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_i=j_i+j_{sa}^{ik}-s}^{+s-k} \binom{()}{(n_i-j_s+1)}$$

$$\sum_{\mathbb{k}_1} \sum_{\mathbb{k}_2} \binom{()}{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}} \sum_{j_{ik}-\mathbb{k}_1} \sum_{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \binom{()}{(n_i-j_s+1)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-j_s+1)}$$

$$\sum_{n_i=n+l_s-j_{sa}^{ik}}^n \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n-l_s+1)}$$

$$\sum_{n_{ik}=n-l_s-j_{sa}^{ik}}^{n_i+j_s-j_{sa}^{ik}} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n-l_s+1)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-j_s+1)}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \frac{(n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!} \cdot \frac{(n - j_s - 1)!}{(n - j_s - n - 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{k=0}^{l_s} \binom{l_s - k}{n + j_{sa}^{ik} - D - s} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \binom{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1}{\sum_{k=1}^{(j_s=l_s+n-D)} \binom{(j_s+1)}{\sum_{j_i=l_i+n+j_{sa}^{ik}-s}^{(n_i-j_s+1)} \binom{j_{sa}^{ik}-k}{\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \binom{n_{is}+j_s-j_{ik}-\mathbb{k}_1}{\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \binom{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=l_i+s-j_{sa}^{ik})}^{(n_i-k+1)} \\
 & \sum_{(n_i-k+1)}^{n} \sum_{(n_{is}=n_i-k+1)}^{n+l_k} \\
 & \sum_{(n_{ik}+j_{ik}-j_i-k_1)}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_{is}-k_1-1)! \cdot (n_{is}-j_s+1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{is}-k_1-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \right)
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
& \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} + 1)!} \cdot \\
& \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(n - j_s - n - 1)! \cdot (j_s - 2)!}{(n - j_s - n - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{i_s}^{ik} + 1)!}{(j_{i_s} + l_{ik} - j_{i_s}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{i_s}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{i_s}^{ik} - l_{ik} - s)!}{(j_{i_s} + l_i - j_i - l_{ik})! \cdot (j_i + j_{i_s}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{i_s}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{i_s}^{ik}+1)} \\
& \sum_{j_{ik}=l_i+n+j_{i_s}^{ik}-D-s}^{l_s+j_{i_s}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{i_s}^{ik}+1)}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^k + 1)!}{(j_s + l_{ik} - j_{sa}^k)! \cdot (j_{ik} - j_{sa}^k + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa}^k - l_{ik})! \cdot (j_i + j_{sa}^k - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n-l_i-j_{sa}^k+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^k-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - j_i - n + l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
 & \sum_{k=D+l_{ik}}^{D-n+1} \sum_{j_i=l_i+n-D}^{l_s-k+1} \sum_{j_{ik}=l_{ik}+n-D}^{l_i-k+1} \sum_{n_{is}=n+l_k-j_s+1}^{n_i-j_s+1} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \binom{j_{sa}^{ik}}{(j_s)}$$

$$\sum_{n_i=n_{sa}^{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n_i-j_s+1)} \binom{n_i-j_s+1}{j_s+\mathbb{k}-j_s+1}$$

$$\sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > 0 - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_s - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{z \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \\
 &\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s+1)} \\
 &\sum_{n_i=n+1}^n \sum_{(n_i+n-j_s+1)}^{(n+j_s+1)} \\
 &\sum_{i_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{sa}^{ik})}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{is})}{(j_s - 2) \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 &\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s)}
 \end{aligned}$$

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$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!}$$

$$\frac{(n - j_i - 1)!}{(n_s - j_i - n - j_i - 1)!}$$

$$\frac{(n - j_s - n - 1)! \cdot (j_s - 2)!}{(n - j_s - n - 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

GÜLDÜŞÜMÜŞ

$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D - l_i - s - n - l_i} \sum_{j_s = l_i + n - D - s + 1}^{(1)} \\
& \sum_{n_i = n + \mathbb{k}}^{n} \sum_{n_s = n + \mathbb{k} - j_s + 1}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}^{()} \sum_{n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2}^{()} \\
& \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^S = \binom{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1}{k=1} \binom{n-s}{j_s=l_s+n-D}$$

$$\sum_{k=1}^{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1} \sum_{j_s=l_s+n-D}^{n-s} \binom{n-k}{j_s=l_s+n-D} \binom{n-k}{j_s=l_s+n-D}$$

$$\sum_{j_s=l_s+n-D}^{n-s} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n-k} \binom{n-k}{j_s=l_s+n-D} \binom{n-k}{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \binom{n-k}{j_s=l_s+n-D} \binom{n-k}{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \binom{n-k}{j_s=l_s+n-D} \binom{n-k}{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D-s+1)}^{(n - j_{sa}^{ik})} \\
 & \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{n+l_{ik}} \sum_{(n_{is}=n-l_i-j_{sa}^{ik}+1)}^{(n_{is}+1)} \\
 & \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{n_{is}+j_s-j_{ik}-l_{ik}} \sum_{(j_i=j_s+1)}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s)}^{(l_i+n-D-s)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \right)
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - k - 1)!}{(n_s - j_i - n - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - k + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i - k + 1)} \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
& \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
& \sum_{k=D+l_i}^{D-n+1} \sum_{j_s=n-l_i-j_{sa}^{ik}}^{(l_s-k+1)} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \left(\sum_{j_{ik}=j_i+j_{sa}^{ik}-1}^{(j_{ik}+j_{sa}^{ik})} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \right)$$

$$\sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - j_s - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n \wedge$$

$$2 \leq j_{sa}^i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i - n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i + j_{sa}^{ik} - s = l_{ik} \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^{S} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}$$

$$\sum_{n_i=n+1}^n \sum_{(n_i+j_s+1)}^{(n+j_s+1)}$$

$$\sum_{i_{ik}=1}^{n_i+j_s-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-n_{sa}^{ik})}^{(n_{ik}+j_{ik}-n_{sa}^{ik})}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

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$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \frac{(n - j_s - n - l_i - 1)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

$$\frac{\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜSÜZ

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(D - l_i)!}{(n - l_i - 1)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{sa}^{ik} = s}^{l_s + s - k} (j_i = l_{ik} + n + s - D - j_{sa}^{ik})$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \frac{\sum_{k=1}^{l_s+s-n-l_i} \sum_{j_s=l_s+n-D}^{(j_s+1)} \sum_{j_{ik}=l_{ik}+n-D}^{(j_i)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜNKYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{(n_{is}=n_{is}+k)}^{n} \sum_{(n_{is}=n_{is}+k)}^{(n_{is}+1)} \\
 & \sum_{(n_{is}+j_s-j_{ik}-j_{sa}^{ik})}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \sum_{(n_{ik}+k_2-j_{ik})}^{(n_{ik}-j_i+1)} \\
 & \frac{(n_{is}-j_s-k_1-1)! \cdot (n_{is}-j_s+1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{is}-j_s-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - k - 1)!}{(n_s - j_i - n - l_i - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D + j_i - n - l_i)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
 & \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(j_s - j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_{sa}^{ik}=j_s+j_{sa}^{ik}-1}^{(j_s - j_{ik} - j_{sa}^{ik} + 1)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(j_s - j_{ik} - j_{sa}^{ik} + 1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+l_k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMNA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
 & \sum_{(n+l_k)}^n \sum_{(n_{is}=n-l_{ik}+1)}^{(n_{is}+1)} \\
 & \sum_{(n_{is}+j_s-j_{ik}-1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \sum_{(n_{ik}+k_2-j_{ik})}^{(n_{ik}-j_i+1)} \\
 & \frac{(n_{is}-l_{k_1}-1)! \cdot (n_{is}-j_s+1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{is}-l_{k_1}-1)!}{(j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$

$D \geq n < n \wedge l_i - l_s > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^s - j_{sa}^{ik} > j_{sa}^s - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

$s > 3, l_s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{s=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{(j_i=j_s+1)}$$

$$\frac{(n_i - n_{ik} - k_1 + 1)!}{(n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\sum_{n_i=n+k_1} \sum_{n_i=n+k_2} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDENMYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!}$$

$$\frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot \dots - j_i)!}$$

$$\sum_{k=i}^n \sum_{\binom{(\cdot)}{j_s=1}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{(\cdot)}{j_i=s}}$$

$$\sum_{n_i=n}^n \sum_{\binom{(\cdot)}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $(D \geq n < n \wedge l_i \leq D - \dots + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + \dots$
- $j_{ik} = j_i + j_{sa}^{ik} - s \wedge$
- $j_{ik} + \dots j_{sa}^{ik} \leq j_i - n \wedge$
- $l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$
- $\dots \leq D - \dots - n) \vee$
- $(D \geq n < n \wedge l_i \leq D + s - n \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{\rightarrow i}^{k, j_i} = \left(\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)} \right)$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=s+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l-1} \sum_{j_s=0}^{n-k+1} \frac{(l_i - k - j_{sa}^{ik} + 1)!}{j_{ik} = j_{sa}^{ik} - s \quad (j_i = l_s + s - k + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-i-l-j_{sa}^{ik})} \sum_{(j_s)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}-l_k-1)} \sum_{n_s=n-j_i}^{(n_{ik}+j_{ik}-j_i-l_k-2)}$$

$$\frac{(n_{ik}-l_k-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-l_k-1)!} \cdot \frac{(n_{ik}+j_{ik}-j_i-l_k-2)!}{(n_s-n_s-1)!} \cdot \frac{(n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_i+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left(\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=s+2)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k-1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_k-2)}$$

GÜLDÜZÜMÜYÜ

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - 1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i + j_{sa}^{ik} - s - 1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l_i - k + 1} \sum_{(j_s=2)}^{i - k + 1} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{i^l-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s)} \sum_{j_i=j_{ik}-j_{sa}^{ik}+1}^{(j_i)} \sum_{j_{ik}=j_i-j_{sa}^{ik}+1}^{(j_{ik})} \sum_{n_i=n+l_k}^{(n_i)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_{ik})} \sum_{n_s=n-j_i+1}^{(n_s)} \sum_{j_i=l_{ik}-l_k+1}^{(j_i)} \sum_{j_{ik}=j_i-j_{sa}^{ik}+1}^{(j_{ik})} \sum_{j_{sa}^{ik}=j_i-j_{ik}+1}^{(j_{sa}^{ik})}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(n_i - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - l_{k1} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \Bigg) -$$

$$\sum_{k=1}^{i^l-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_s)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(j_{ik})} \sum_{j_i=s+1}^{(l_s+s-k)}$$

GÜLDÜZMÜŞA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - \dots - 1)! \cdot (\dots - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i - \dots)!}$$

$$\sum_{k=1}^{(j_s)} l_i^{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$D \geq n < n \wedge l_s \leq D - \dots + 1 \wedge$

$1 \leq \dots j_{ik} - j_{sa}^s + 1 \wedge$

$j_{ik} = j_i + j_{\dots} - s \wedge$

$j_{\dots}^{sa} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$\mathbf{s}: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge \mathbf{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik} = j_{ik} + 1}^{l_s + i^{l-k}} \sum_{(j_i = j_{ik} + s - 1)}^{(n - j_s + 1)}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n - j_{ik} + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{lk}-k+1}^{l_i+j_{sa}^{lk}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{lk})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_i-n_s-1)!}{(j_i-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=i}^l \sum_{(j_s=1)}^{()}
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}}^{l_i+j_{sa}^{lk}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}+1)!}
 \end{aligned}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{j_s=1}^{j_{ik}-j_{sa}^{ik}}$$

$$(j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{j_{sa}^{ik}=1}^{j_{ik}-k}$$

$$(j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i=n+l_k}^n$$

$$\sum_{n_s=n+l_k-j_s+1}^{(n_i-j_s+1)}$$

$$(n_s = n + l_k - j_s + 1)$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

GÜLDÜNYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\cdot)}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$l_i \leq D + s - n) \vee$

$(D \geq n < n \wedge l_i \leq D + s - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_i - s + 1 > l_s$

$l_i \leq D + s - n) \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^l - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \binom{(\quad)}{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_s+1)}^{(n-j_s+1)}$$

$$n_{is} + j_s - j_{ik} - k_1 \quad (n_{is} = n - j_s + 1 - k_2)$$

$$\sum_{n_{ik}=n+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n - n_{ik} - 1)!}{(n - j_s - 1)! \cdot (n_s + j_s - j_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n - n_s - 1)!}{(n - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \binom{(\quad)}{(\quad)}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_{ik} + l_{k_2} - j_{ik} - j_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^l \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \left(\sum_{k=1}^{i-1} \sum_{s=2}^{k-j_{sa}^{ik}+1} \right) \\
& \sum_{k=1}^{l_s+j_{sa}^{ik}} \sum_{s=2}^{(l_i-k+1)} (j_{ik}+s-j_{sa}^{ik}+1) \\
& \sum_{n_i=1}^n (n_{is}=n+k-j_s+1) \\
& \sum_{k_2=j_{ik}+1}^{n_{is}+j_{ik}-k_1} \sum_{k_1=1}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_s=n-j_i+1) \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik} - j_{sa}^{ik} + 1)}^{(l_i - k + 1)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik} + k_2 - j_{ik}}^{n_{is} + j_s - j_{ik} - k_2} \sum_{(j_i+1)}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-l+1} \sum_{(j_i=j_{ik+s}-j_{sa}^{ik}+1)}^{(l_i-l+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n - j_i)!} \cdot \\
 & \frac{(n_i + j_i - n - 1)! \cdot (n - j_i)!}{(n_i - j_{ik} - \mathbb{k}_1 - 1)! \cdot (n - j_{ik} - \mathbb{k}_1 - 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - \mathbb{k}_1 + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}{(l_i - j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik+s}-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜZ

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik}}^{()} \sum_{(j_i=s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}^{ik}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}^{ik}-k_2)}$$

$$\frac{(n_i + j_i - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - j_i - k_1 - k_2 - j_{sa}^s)! \cdot (n + j_i - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{ik}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$$

$$l_i \leq D + j_{sa}^{ik} - n \wedge$$

$$D > n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, \dots, k_2, \dots, j\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-n_{ik}+j_{ik}-n_s-j_i)!}{(j_i-n_{ik}-1)! \cdot (n_s-n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-n_{ik}-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}+1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{(j_s = \dots, k+1)}$$

$$\sum_{j_{ik} = \dots, j_{sa}^{ik} - 1} \binom{(\dots)}{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i = n + k} \sum_{(n_s = n + k - j_s + 1)} \binom{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)} \binom{(\dots)}$$

$$\frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s = 1)} \binom{(\dots)}$$

$$\sum_{j_{ik} = j_{sa}^{ik}} \sum_{(j_i = s)} \binom{(\dots)}$$

$$\sum_{n_i = n + k} \sum_{(n_{ik} = n_i - j_{ik} - k_1 + 1)} \sum_{(n_s = n_{ik} + j_{ik} - j_i - k_2)} \binom{(\dots)}$$

GÜLDÜNYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge$$

$$j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})} \binom{(\quad)}{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n - j_s + 1)}^{(n_i - j_s + 1)} \binom{(\quad)}{(\quad)}$$

$$\sum_{n_{ik}=n+k_2 - j_{ik}}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s=n - j_i + 1)}^{(n_{ik} - k_2)}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - k_1)!}$$

$$\frac{(n - n_s - 1)!}{(n_{ik} - j_{ik} - k_1) \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik} - i^{l+1}} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(\quad)}$$

GÜLDÜZÜMÜSÜ

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_1})!} \cdot \\
 & \left(\frac{(D - l_{ik})!}{(D - n_i - l_{k_1} - 1)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{i-l-1} \sum_{\substack{(l_s-k+1) \\ (j_s=2)}} \right) \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{n+l_k}^n \sum_{(n_{ik}=j_{ik}-k_2-j_{ik}+1)}^{(j_{ik}-k_1+1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \Bigg) -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

GÜLDENMYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i+j_s-j_i-l_{k_1}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!}$$

$$\frac{(l_s-l_k-1)!}{(j_i-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$\sum_{k=i}^l \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!}$$

$$\frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n+l_s \wedge l_s \leq D-n+1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_{sa}^{ik}+1}^{j_{sa}^i} \sum_{j_{sa}^s}^{(l_s+s-k)} \sum_{j_{ik}=j_i+j_{sa}^s}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^{(n_i=n+\mathbb{k}-j_s+1)} \sum_{n_{is}+j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_s+s-k+1) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_s-n-j_i+1)} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_s-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_i+n-D) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{l(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-l+1)} \sum_{(j_i=l_i+n-D)}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDENREYNA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{(j_s=j_i+j_{sa}^s, \dots)}$$

$$\sum_{(n_i-j_s+1, \dots)}$$

$$\sum_{n_{ik}=n_{is} - j_{ik} - k_1, \dots} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i + j_s - j_{ik} - k_1 - k_2 - j_{sa}^s)!}{(n_i - j_{ik} - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^s - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_z^S(j_{ik}, j_i) = \frac{\sum_{k=1}^{(l_{ik} + s - n - l_i - j_{sa}^{ik} + 1)} \sum_{j=2}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{k=j_i + j_{sa}^{ik} - s}^{(l_s + s - k)} \sum_{j_i = l_i + n - D}^{(n - j_s + 1)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik}+1)} \sum_{(n_i-j_s+1)}$$

$$\sum_{(n_{ik}+k-j_s+1)} \sum_{(n_{ik}+k-j_s+1)}$$

$$\sum_{(n_{ik}+k_2-j_{ik})} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-n_i-1)!}{(j_i-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_i-1)!}{(n_s)!(j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\frac{\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_i)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-\mathbf{n}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

GÜLDÜMÜŞKA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D}^{i^{l-1}} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^{(j_s)} \binom{(j_s)}{k} \\
& \sum_{j_{ik}=i+n-D}^{l_i+l+1} \binom{l_i+l+1}{j_{ik}+n-D} \binom{l_i+l+1}{j_i+l+n-D} \\
& \sum_{n+l_k}^n \sum_{n_{ik}=k_2-j_{ik}+1}^{j_{ik}-k_1+1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s)}
\end{aligned}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s+l_1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_i-j_i-l_{k_2})}^{(\quad)}$$

$$\frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-l_{k_2})! \cdot (j_{sa}^s)!}$$

$$\frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D)}{(D+j_s-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_{k_1} \leq D + l_i + s - n - 1 \wedge$

$D > n < n \wedge l = l_{k_1} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^{s-1} \wedge j_{sa}^s > j_{sa}^{s-1} \wedge$

$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_i\} \wedge$

$s \leq l_s \wedge l_s = s + l_k \wedge$

$l_{k_z}: z = 2, \dots, k = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_s-n_s-1)!}{(j_i-n_s-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_{ik})!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=0}^{l_i} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-k-s+1}^{i+l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(l_s-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{sa}^{ik}=l_i+j_{sa}^{ik}-s+1}^{l_i+j_{sa}^{ik}-s+1} \sum_{j_{ik}+j_{sa}^{ik}-D-s=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=n+l_{k_1}}^{n} \sum_{n_i=n+l_{k_2}}^{n+l_{k_2}-1} \sum_{n_s=n-j_i+1}^{n-l_{k_1}-j_i-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!} \cdot \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$

$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_i - s + 1 > l_s \wedge$

$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$

$D \geq n < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k} \wedge$

$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > s \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{z^S \Rightarrow j_s, j_{ik}, j_i} = & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_i=n-j_s+1)}^{(n-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}-k_1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \\
 & \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \\
 & \frac{(n_{is}-n_s-1)!}{(n_{is}-j_s-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \right. \\
 & \left. \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \right)
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_{k_2} - 1)!}{(n_s - j_i - n - l_{k_2} - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_{k_2} - 1)!}{(n - j_s - n - l_{k_2} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_i-j_s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{D+l_{ik}+s-n-l_i} \sum_{j_s=2}^{l_i-k+1} \sum_{j_{ik}=l_s+j_s}^{l_i-k+1} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{n} \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}+j_{ik}-j_i-k_2)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_i=l_{ik}+n-l_i-j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=-D)}^{(l_s-k+1)}$$

$$\sum_{n_{is}+j_{sa}^{ik}-l_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{sa}^{ik}-l_{ik}-k_2)}^{(n_i-j_s+1)}$$

$$\sum_{n_{is}+k_2-j_{ik}}^{(n_{ik}+j_{sa}^{ik}-l_{ik}-k_1)} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^n \sum_{j_s=1}^{(n-k)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{j_i=l_i+n}^{(l_i-i+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_s=j_i+1}^{n_{ik}+j_{ik}-j_i-k_1} \\
 & \frac{(n_i - n_{ik} - k_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_s + 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \\
 & \frac{(j_{sa}^{ik} - l_{ik} - s)!}{(j_i + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(n-k)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n-k)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_i+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n_i-j_s+1)}
 \end{aligned}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Sigma} (j_s - n - l_i - 1) \\
 & \sum_{k=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{n_{is}+j_{sa}^{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{sa}^{ik}-j_i-k_2)}$$

$$\sum_{n_{ik}+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_{ik} - l_s - j_{ik} - 1)!}{(l_{k_1} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \binom{(\quad)}{\quad} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDENWA

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k} = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GUIDANCE

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_{ik})!} \cdot \\
& \left(\sum_{k=2}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{s=2}^{n-D-s} \right) \\
& \sum_{l_i+n-D}^{j_i+j_{sa}^{ik}-1} \sum_{l_i+n-D}^{(l_{ik}+s-k)+1} \\
& \sum_{n_i=0}^n \sum_{k_1=0}^{l_i-l_s-k_1} \sum_{k_2=0}^{l_i-l_s-k_1-k_1} (n_{is}=n+k-j_s+1) \\
& \sum_{n_{ik}=0}^{n_{is}-j_{ik}-k_1} \sum_{n_s=n-k_2}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+j_{ik}-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{\dots - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{is} - k_1 - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-j_i-n_s)}{(j_i-1)! \cdot (j_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n_s-j_i-1)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{lk}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{lk}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{lk}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+l_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=l_i+n-D)}^{(l_i-i^{l+1})} \\
 & \sum_{n_i=n+l_1}^n \sum_{(n_{ik}=n+l_2-j_{ik}+1)}^{(n_i-j_{ik}-l_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_2} \\
 & \frac{(n_i - n_{ik} - l_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}
 \end{aligned}$$

GÜLDENREINER

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+k}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n_i-j_s+1)} \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

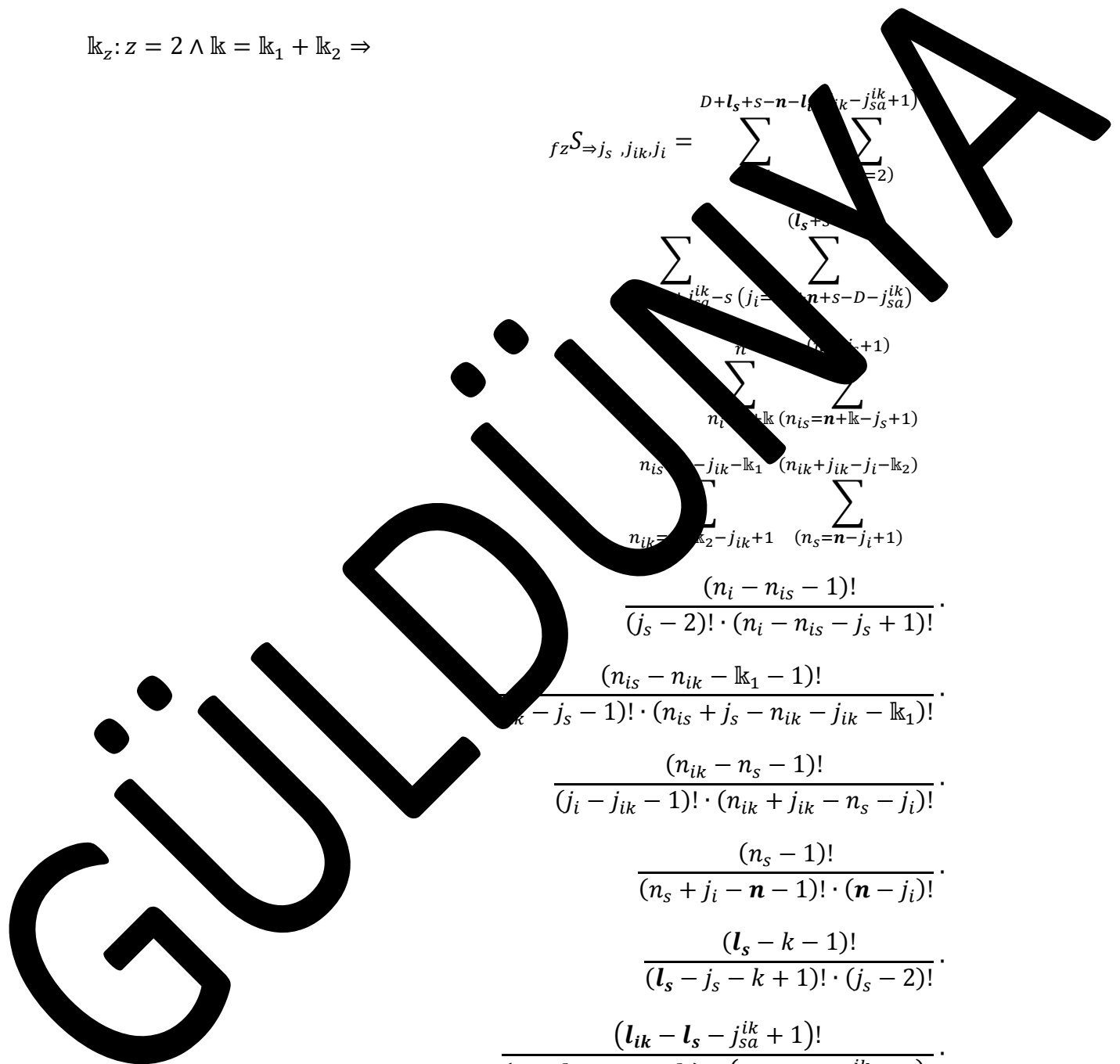
$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \frac{\sum_{l_s+s-n-l_i}^{(k-j_{sa}^{ik}+1)} \sum_{j_i=2}^{(l_s+s)} \sum_{j_{sa}^{ik}-s}^{(j_i+n+s-D-j_{sa}^{ik})} \sum_{n_i=0}^n \sum_{n_{is}=\mathbb{k}}^{(n_i+l_i+1)} \sum_{n_{ik}=\mathbb{k}_2-j_{ik}+1}^{(n_i+l_i+1)} \sum_{n_{ik}=\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{n_{is}=\mathbb{k}_2-j_{ik}+1}^{(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$



$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik_2}+1}^{n_{is}+j_s-j_{ik_2}-j_{ik_1}+j_{ik_2}-l_{k_2}} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_s - n_s - 1)!}{(n_s - j_i - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - j_i - n - l_{k_1} - 1)!}{(n_s - j_i - n - l_{k_1} - j_i)!} \cdot \\
 & \frac{(n_s - j_s - n - l_{k_1} - 1)! \cdot (j_s - 2)!}{(n_s - j_i - n - l_{k_1} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_{ik} + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{i=l}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-i-l-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_i+l_k} \binom{l_s+l_i}{j_{sa}^{ik}+1}$$

$$\sum_{j_i+l_k+l_{sa}^{ik}-s}^{l_s+l_i} \binom{l_s+l_i}{j_i+l_k+l_{sa}^{ik}-s} \binom{l_s+l_i}{j_i+l_k+l_{sa}^{ik}-s}$$

$$\sum_{n_i+l_k}^{n_i+l_k+l_{sa}^{ik}-s} \binom{l_s+l_i}{n_i+l_k+l_{sa}^{ik}-s} \binom{l_s+l_i}{n_i+l_k+l_{sa}^{ik}-s}$$

$$\sum_{=n_{is}+j_{sa}^{ik}-l_{k_1}} \binom{l_s+l_i}{=n_{is}+j_{sa}^{ik}-l_{k_1}} \binom{l_s+l_i}{=n_{is}+j_{sa}^{ik}-l_{k_1}}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i + j_s - j_i - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{sa}^{ik} + s - 1 \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^S \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=l_{ik}+n}^{l_s+j_{sa}^{ik}-k} \sum_{j_{i_s}=j_{ik}-\mathbb{k}_1}^{(n_i-j_s)} \sum_{j_i=l_{ik}}^{(n_i-j_s)} \sum_{(n=n+j_i-1)}^{(n+\mathbb{k}-j_s+1)} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 1)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)!(n_{is}-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_s-n_{ik}+j_{ik}-n_s-j_i)!}{(j_i-1)!(n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDÜZMİN

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l_{ik} - 1)!}{(l_s - j_{ik} - l_{ik} - 1)! \cdot (l_s - j_{ik} - l_{ik} - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{(\cdot)} \sum_{i=1}^{(\cdot)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + \dots - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - \dots - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - \dots + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = \dots + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq \dots \leq n \wedge$$

$$l_{ik} = \dots + 1 > l_s \wedge \dots + j_{sa}^{ik} - \dots = l_{ik} \wedge$$

$$\dots + s - \dots < l_i \leq D + \dots + s - n - 1 \wedge$$

$$D \geq n < n \wedge l_s \leq D - n \wedge$$

$$j_{sa}^{ik} = j_{sa}^i \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$\dots \{j_{sa}^s, \dots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S \Rightarrow j_s, j_{ik}, j_i} = & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{n_{is}+j_{ik}-1} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{is} - n_s - 1)!}{(n_{is} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=D+l_s+s-\mathbf{n}-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
 \end{aligned}$$

GÜLDÜZMÜŞA

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{j_s=1}^{(j_s)} \sum_{j_{ik}=1}^{(j_{ik})}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i)}$$

$$\sum_{n_i=n+l_k}^{(n_i-n_{ik}-k_1+1)} \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

GÜLDÜMNA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i+j_s-j_i-l_{k_1}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+l_s-n-l_i)! \cdot (n-j_i)!}{(D+l_s-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{k_1} \wedge$$

$$D > n < n \wedge l_s = l_k > 0$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = l_k \wedge$$

$$l_{k_2} = l_k \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i - k - 1)!} \cdot \\
 & \frac{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_{i_s} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_{ik}=D+l_s+s}^{D-n+1} \sum_{j_s=l_s+n-D}^{l_i+1} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{(j_s=j_i+l_{ik}, \dots)}$$

$$\sum_{(n+l_{ik}, \dots)}$$

$$\sum_{(n_{ik}=n_{is}, \dots)}$$

$$\frac{(n_i + j_s - \dots - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - \dots - l_{k_1} - \dots)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_s - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i - l_i \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$n - l_i = I = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n-j_s+1)}$$

$$\sum_{n_i=n+l_i}^n \sum_{(n_i+j_s+1)}^{(n+l_i+j_s+1)}$$

$$\sum_{n_{ik}=n+l_i-j_{sa}^{ik}}^{n_i+j_s-j_{sa}^{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_i)}^{(n_{ik}+j_{ik}-j_i)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n-j_s+1)}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{lk}-D-s}^{l_i+j_{sa}^{lk}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜSÜZ

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i - 1)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot$$

$$\frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1)$$

$$\sum_{l_i + n + j_{sa}^{ik} - D - s}^{l_s - j_{sa}^{ik} - k} \binom{(\quad)}{(j_i = j_{ik} + l_i - l_{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \binom{(\quad)}{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz \stackrel{S \Rightarrow j_s, j_{ik}, j_i}{=} \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_i=l_i+n-D-s)} \frac{\binom{n_i - j_s + 1}{n_i = n+k} \binom{n_i - j_s + 1}{n_{is} = n+k - j_s + 1}}{\binom{n_i - n_{is} - 1}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{(n_{is}=n_{ik}+1)}^n \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \sum_{(j_i=j_{ik}+1)}^{n_{ik}+l_{k2}-j_{ik}} \sum_{(n_{ik}+j_{ik}-j_i-l_{ik})}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - l_{k1})!} \\
 & \frac{(n_{is} - n_{ik} - l_{k1} - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - l_{k1})!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}
 \end{aligned}$$

GÜLDÜZ

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik})!} \cdot \\
 & \frac{(n_s - j_i - n_{i_s} - 1)!}{(n_s - j_i - n_{i_s} - j_i - j_{ik})!} \cdot \\
 & \frac{(n_{i_s} - j_s - n_{i_s} - 1)! \cdot (j_s - 2)!}{(n_{i_s} - j_s - n_{i_s} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{i_s}^{ik} + 1)!}{(n_{i_s} + l_{ik} - j_{i_s}^{ik})! \cdot (j_{ik} - j_s - j_{i_s}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{i_s}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{i_s}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{i_s}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S \Rightarrow j_s, j_{ik}, j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_s - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
& \sum_{k=0}^{D+l_s+j_i-n-l_i} \sum_{l=0}^{(l_s-k+1)} \sum_{m=0}^{(l_s+n-D)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-k_2} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_{is}-n_{is}-1)!}{(j_i-2)! \cdot (n_{is}-j_s+1)!} \\
 & \frac{(n_{is}-n_{is}-k_1-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}
 \end{aligned}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_s \geq j_{sa}^{ik} - 1 \wedge$

$s \in \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_s\} \wedge$

$s > 3 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz^{S \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_s + s - n - l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{j_{ik} = l_{ik} + s}^{D - n + l_{ik} + s} \sum_{j_s = l_s + n - D}^{(l_s - k + 1)} \binom{n - k + 1}{j_i = j_{ik} + l_i - l_{ik}} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{(n_i=n+1)}^{(n_i=n+1)} \frac{(n_i - j_s - j_i - l_{ik} - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > l_i > n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+1)}^{(n_i+j_{ik}-l_{ik_2})} \\
 &\quad \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\quad \frac{(n_i - n_s - 1)!}{(n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{i=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_s+1}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{sa}^{ik}+1}^{(j_s - j_{sa}^{ik} + 1)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_i} = \sum_{k=1}^{l-1} \binom{j_{sa}^{ik}+1}{j_s} \binom{l_s+s-k}{j_{ik}-j_s} \binom{n_i-j_s+1}{n_i+n+k} \binom{n_i+n+k}{n_i+n+k-j_s+1} \binom{n_{is}+j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j_i-k_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - k + 1)} \sum_{(j_i=l_s+s-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-l_{ik_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_s - n_s - 1)!}{(n_s - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - i^{l+1})} \sum_{(j_i=s)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{l-1} \sum_{\substack{(\quad) \\ (j_s=j_{ik}-j_{sa}^k+1)}} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{(\quad)} \sum_{(j_s=1)}^{(\quad)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j_s=1}^{()} \sum_{k=j_{sa}^{ik}}^{()} \sum_{j_i=j_{ik}+l_i-l_{ik}}^{()} \sum_{n_i=n+l_k}^{(n_i=n+l_k-l_{k_1}+1)} \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \sum_{n_s=n-j_i+1}^{()}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{()}$$

GÜLDÜMNA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(l_s-l_k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(D-l_i)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}
 \end{aligned}$$

$$D \geq n < n+l_s \wedge l_s \leq D-n+1 \wedge$$

$$1-j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge$$

$$j_{ik}=j_i+j_{sa}^{ik}-s \wedge$$

$$j_{ik}+s-j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik}-j_{sa}^{ik}+1 > l_s \wedge l_i+j_{sa}^{ik}-s=l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

GÜLDÜMVA

$$\begin{aligned}
 & f_{z \Rightarrow i} \sum_{k=1}^{l-1} \sum_{j_i}^{j_{ik}} j_i^{l-k+1} \\
 & \sum_{j_s}^{l+j_{sa}^{ik}-k-1} \sum_{j_i}^{j_{ik}} (j_i - l_{ik}) \\
 & \sum_{n_i=n+k}^{(n_i-j_s+1)} \sum_{(n_{is}=n+k-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{i^l-1} \sum_{(j_s=1)}^{(i)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n+l_k-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} - 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_i + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i^l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(i)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(i)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s-1)} \sum_{(j_s=1)}^{(j_s-1)} \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=j_{ik}-j_{sa}+1)}^{(j_{ik}-j_{sa}+1)} \sum_{n_s=j_{ik}-j_i-l_{k_2}}^{(j_{ik}-j_i-l_{k_2})} \frac{(n_i - n - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} -$
- $j_{ik} + s - j_{sa}^{ik} < j_i \leq n$
- $l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{k_2} \wedge$
- $D + s - n < l_i \leq D + s - n - 1 \wedge$
- $D \geq n < n \wedge l = l_{k_2} > 1 \wedge$
- $j_{sa}^{ik} - l_{k_2} - 1 \wedge j_{sa}^{ik} > j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, j_{sa}^{ik}, l_{k_2}, j_{sa}^i\} \wedge$
- $j_{sa}^{ik} = s + l_{k_2} \wedge$
- $l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_s)}{(j_i+l_{k_1}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_{ik} - k + 1)! \cdot (l_s - j_{ik} - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=0}^{l_i} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i-k+1)} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{(l_i=1)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+l_{k_1}}^{n+l_{k_1}+1} \sum_{n_i=n+l_{k_2}}^{n+l_{k_2}+1} \sum_{n_s=n-j_i+1}^{n-j_i+l_{k_2}}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$

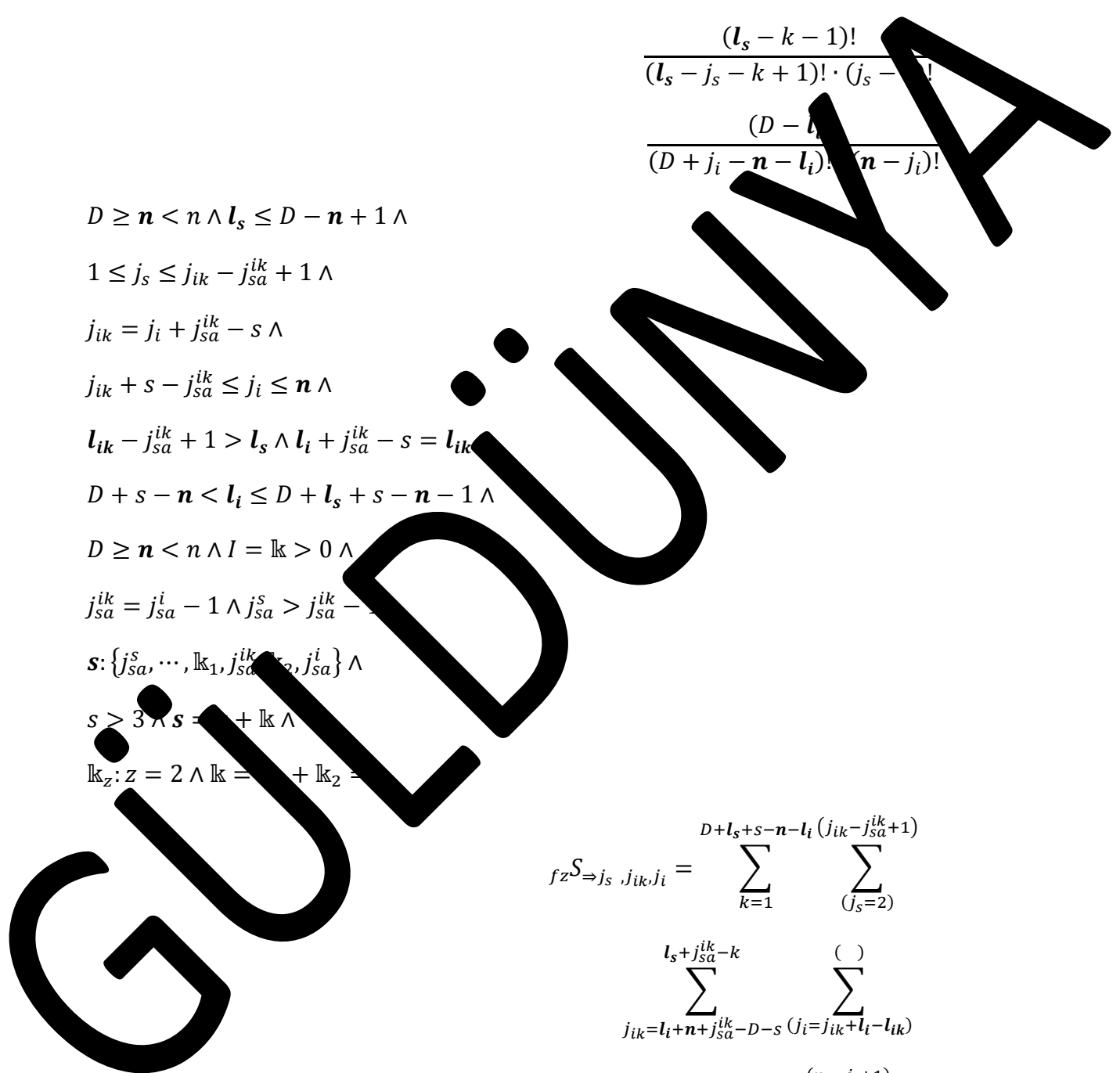
$s > 3 \wedge s = \dots + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 =$

$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$

$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$

$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$



$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_{sa} - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-\mathbf{n}-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}
 \end{aligned}$$

GÜLDÜMÜKKA

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i - 1)!}{(D + j_i - n - l_i)! \cdot (j_i - 1)!} + \\
& \sum_{i=0}^{l_i - 1} \sum_{j_s=2}^{l_s - k + 1} \sum_{j_{ik}=l_i}^{l_i + j_{sa}^{ik} - 1} \sum_{j_{sa}^{ik}=D-s}^{j_{sa}^{ik} - D - s} \binom{l_i - k + 1}{j_s} \binom{l_i - k + 1}{j_{ik} + l_i - l_{ik}} \\
& \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik}=n+k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{n_s=n - j_i + 1}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n+l_k-j_i-l_{k_2})}^{(n_{ik}+j_i-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_i - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_s - n_s - 1)!}{(j_i - j_i - 1)! \cdot (n_s + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

GÜLDÜZMAYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Delta} (j_s - n - l_i - k - 1)! \\
 & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \binom{()}{(j_i=j_{ik}+l_i-l_{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜMNA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \dots$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_i + j_{sa}^{ik} - i^{l-s+1}} \binom{(\quad)}{\quad} \\
 & \sum_{n_i = n + k}^n \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_s = n - j_i}^{n_{ik} + j_{ik} - j_i - k_2} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - j_{ik} - l_s - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D + j_i - n - l_i} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - k + 1)} \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \binom{(\quad)}{\quad} (j_i = j_{ik} + l_i - l_{ik}) \\
 & \sum_{n_i = n + k}^n \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \binom{(\quad)}{\quad} (n_s = n_{ik} + j_{ik} - j_i - k_2) \\
 & \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜM

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s} \sum_{(j_s=2)}^{n-l_i(j_{ik}-j_{sa}^{ik}+1)} \\ & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{fzS \Rightarrow j_s, j_{ik}, j_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n+l_i+l_s-k+1} \sum_{j_s=2}^{(l_s-k+1)} \\
 & \frac{(l_{ik}+j_s-1)!}{\sum_{j_i+l_{ik}-l_i=j_s-1} \sum_{l_s+s-k+1}^{j_s+1}} \\
 & \frac{(n_{ik}+k-1)! \cdot (n_{is}+n+k-j_s+1)!}{\sum_{n_{ik}=1}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2}} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜMNYA

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_{ik}-k_1-j_{ik}-k_2)}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+1)!}$$

$$\frac{(n_{ik}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{is}-n_s-1)!}{(n_{ik}+j_{ik}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()} l$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-i^{l-1}-j_{sa}^{ik}+1)}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_i - l_s - j_{sa})!}{(l_{ik} - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - l_k)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^k+1)}^{(j_s=j_{ik}-j_{sa}^k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-k)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(j_s=j_{ik}-j_{sa}^k+1)} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 & \sum_{k=1}^{s-n-j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(n-j_s+1)} \\
 & \sum_{l_{ik}=l_i+n-D}^{l_s+j_{sa}^{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n-j_s+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$D + l_s + s - n - l_i \quad (l_s - k + 1)$$

$$\sum_{k=1} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_{ik}=l_s+j_{sa}^{ik}-k+1)}^{(n_i-j_s+1)}$$

$$(n_i - j_s + 1)$$

$$\sum_{n+l_k}^{(n+l_k-j_s+1)} \sum_{(n+l_k-j_s+1)}$$

$$n_{is} + j_{ik} - k_1 \quad (n_{is} + j_{ik} - k_1)$$

$$\sum_{n+l_k-j_{ik}}^{(n+l_k-j_{ik})} \sum_{(n+l_k-j_{ik})}^{(n_s=n-j_i+1)}$$

$$(n_i - n_{is} - 1)!$$

$$(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!$$

$$(n_{is} - n_{ik} - k_1 - 1)!$$

$$(j_{ik} - n_{is} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!$$

$$(n_{ik} - n_s - 1)!$$

$$(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!$$

$$(n_s - 1)!$$

$$(n_s + j_i - n - 1)! \cdot (n - j_i)!$$

$$(l_s - k - 1)!$$

$$(l_s - j_s - k + 1)! \cdot (j_s - 2)!$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!$$

$$(D - l_i)!$$

$$(D + j_i - n - l_i)! \cdot (n - j_i)! +$$

$$i-1 \quad (l_s - k + 1)$$

$$\sum_{k=D+l_s+s-n-l_i+1} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!}$$

$$\frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (j_s - n_{is} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_s - n_s)!}{(j_i - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

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$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{D+l_s+s} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_{ik}-k} \sum_{j_{ik}=j_{ik}+n-D}^{j_{ik}+n-D} (j_i=j_{ik}+l_i-l_{ik}) \sum_{n_i=n+l_k}^{n_i=n+l_k} \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(l_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > l_i - n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} = j_{sa}^i - 1 \wedge j_{sa}^s > j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \frac{\sum_{k=0}^{D+l_s+s-n-l_i} \sum_{(j_s-2)}^{(n-D-j_{sa}^{ik})} \sum_{i_{ik}=l_{ik}+n-k+1}^{i_{ik}=j_{ik}+l_i-l_{ik}} \sum_{(n_{is}+k)}^{(n_{is}+n+k-j_s+1)} \sum_{(n_{ik}=k_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{n_i+j_{ik}-l_{ik}} \sum_{(n_{ik_2}=n+k_2-j_{ik_2})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik_2}-1}^{n_i+j_{ik}-l_{ik}} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{ik_2} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_s - n_s - 1)!}{(n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{\binom{D}{l}} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
& \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{ik}+l_i-l_{ik})}^{(n_i-k+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_i-k+1)} \\
 & \sum_{n_{ik}=n_{is}+j_{ik}-k_1}^{(n_i-k+1)} \sum_{(j_{ik}-k_2)}^{(n_i-k+1)} \\
 & \frac{(n_i - j_s - j_i - l_i - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (j_s + j_i - j_{sa}^s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}} = \sum_{k=0}^{l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{sa}^{ik}+1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-D)}^{(n_i-j_s+1)} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=n-D}^{l_s-k+1} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}}^{j_i+l_s-k+1} \sum_{j_i=l_s+s-k+1}^{j_s+1} \\
 & \sum_{n_{is}=n+k-j_s+1}^{n_{is}+k} \sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \sum_{n_{ik}=n_{is}-j_{ik}+1}^{n_{ik}+j_{ik}-j_i-k_2} (n_s=n-j_i+1) \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-i-k_2)}^{(n_{ik}+j_{ik}-i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{(\cdot)}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-n)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s +$$

$$\mathbb{k}_2: z = 2 \wedge = \mathbb{k}_1 + \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=1}^{D+l_i-j_i-n-l_i-j_{sa}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{j_s=n-D}^{k-j_{sa}^{ik}+1} \right)$$

$$\frac{j_i^{l_{ik}-s-1} (l_s+s)!}{(j_i+l_{ik}+n-j_{ik}-j_{sa}^{ik})! \cdot (j_i+l_{ik}+n-j_{ik}-j_{sa}^{ik})!} \cdot$$

$$\sum_{n_i=0}^n \sum_{n_{is}=n+l_k-j_s+1}^{n_i+l_k} \sum_{n_{ik}=j_{ik}-l_{k_1}}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{n_{ik_2}=j_{ik}+1}^{n_{ik_2}-j_{ik}+1} (n_s=n-j_i+1)$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

GÜLDÜZYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=n_{is}+1)}^{n+l_k} \sum_{(n_{is}=n_{is}+1)}$$

$$\sum_{(n_{ik}+l_{k2}-j_{ik})}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})}$$

$$\frac{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_s-l_{k2}-1)!}{(j_i-l_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k2})!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}^{ik}-n_{is}+n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{ik}-k_2)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - l_{k_2})!} \cdot \\
& \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - j_s - 1)!}{(j_s - j_s + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_s - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-D)}^{(\quad)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
& \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S \Rightarrow j_s, j_{ik}, j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(D + j_{ik} - n - l_i)! \cdot (j_i - j_{ik} - 1)!} + \\
 & \sum_{k=0}^{D+l_s+j_{ik}-l_i} \sum_{l=0}^{(l_s-k+1)} \sum_{m=0}^{(l_s+n-D)} \\
 & \sum_{j_{ik}+j_{sa}^{lk}-s+1}^{l_i+j_{sa}^{lk}-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{(j_i=j_{ik}+s-j_{sa}^{lk})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMÜN

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
 & \sum_{(n_{is}=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{n} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{ik}+1)} \\
 & \frac{(n_{is}+j_s-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-j_i-\mathbb{k}_2)!}{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2-1)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)}
 \end{aligned}$$

GÜLDÜZYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - \dots - 1)! \cdot (\dots - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - \dots - l_i)! \cdot (n - \dots)}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}^s\} \wedge$

$s > 3 \wedge s = s + 1$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - \mathbb{k}_1 - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_s - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{l_{ik}+s-\mathbf{n}-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+\mathbf{n}-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{(\quad)}{\quad}} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{is}=\mathbf{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - j_i - n - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
 & \left(\frac{(D + l_{ik} + s - n - l_i - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!}{\sum_{k=1}^{l_i + n + j_{sa}^{ik} - s - 1} \sum_{j_i = l_{ik} + n - D}^{l_i - k + 1} (j_i - l_i + n - D)!} \right) \cdot \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=n-D)}^{l_i-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j_{ik}-D-s}^{l_s+j_{sa}^{ik}} \sum_{(j_s=n-D)}^{(l_i-k)}$$

$$\sum_{n_i=n-k}^n \sum_{(n_{is}=n+k-j_s+1)}$$

$$\sum_{n_{is}=j_{ik}-k_1}^{n_{is}+j_{ik}-k_1} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

GÜLDÜZYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
 & \sum_{(n_{is}=n_{ik}+1)}^n \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \sum_{(j_i=j_{ik}-j_{sa}^{ik}+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \sum_{(j_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{ik} - n_{ik} - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{ik}-k_2)!}{(j_i-j_{ik}-k_2)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \\
 & \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!} \cdot \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} -$

$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 3 \wedge s = s + \dots \wedge$

$\mathbb{k}_z: z = 2 \wedge \dots = \mathbb{k}_1 + \dots \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=1}^{l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=D+l_s+s-j_i+1}^{D-n+1} \sum_{l_s-k+1}^{l_s-k+1} (j_s - l_i + n - D) \\
& \sum_{l_i+j_{sa}^{ik}-s+1}^{l_i+j_{sa}^{ik}-s+1} \sum_{n+j_{sa}^{ik}-D-j_i=j_{ik}+s-j_{sa}^{ik}}^{n+j_{sa}^{ik}-D-j_i=j_{ik}+s-j_{sa}^{ik}} \\
& \sum_{n_{is}+k}^{n_{is}+k} (n_{is}+n+k-j_s+1) \\
& \sum_{n_{ik}=k_2-j_{ik}+1}^{n_{is}-j_{ik}-k_1} (n_{ik}+j_{ik}-j_i-k_2) \\
& \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{ik}^s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-1} \sum_{(n_{is}=n_{ik}+j_{ik}-j_i^s)}$$

$$\frac{(n_i - n - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (j_s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n \wedge l_s$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_s + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq n \wedge$$

$$l_{ik} = j_{sa}^{ik} + 1 > l_s \wedge j_{sa}^{ik} = l_{ik} \wedge$$

$$D \geq n \wedge l_s \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge s = j_{sa}^i - 1 \wedge$$

$$s: \{j_{sa}^i, k_1, k_2, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s} j_{ik} j_i = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \right)$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)}$$

$$\frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+n_{is}+j_{sa}^{ik}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-j_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \left(\frac{(D - l_i)}{(D + j_i - l_i - l_j)! \cdot (n - j_i)!} \right) + \\
& \left(\sum_{k=1}^{D+l_i+l_j-s-n-l_i-j_{sa}+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \right) \cdot \\
& \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \frac{D + l_{ik} + s - n - l_i - j_{sa}^{ik}}{\sum_{k=1}^n} \cdot \frac{(l_i + D - s)!}{(j_s = l_s + n - k + 1)!} \cdot \\
 & \frac{j_{ik} = l_{ik} + s - D}{\sum_{k=1}^n} \cdot \frac{(j_i = l_{ik} + s - k - j_{sa}^{ik} + 2)!}{\sum_{n_i = n + k}^n} \cdot \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \cdot \\
 & \frac{j_s - j_{ik} - k_1}{\sum_{n_{ik} = n + k_2 - j_{ik} + 1}} \cdot \frac{(n_{ik} + j_{ik} - j_i - k_2)!}{\sum_{(n_s = n - j_i + 1)}} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_i-k+1)}$$

$$\sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+l_{ik}-j_s+1)}$$

$$\sum_{(n_{ik}-l_{ik}-1)}^{n_{is}+j_s+l_{ik}-l_{ik}} \sum_{(n_{ik}-j_i-l_{ik})}$$

$$\sum_{(n_s=n-j_i+1)}^{n_{ik}+l_{ik}-j_{ik}} \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+2}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-i-k_2)}^{(n_{ik}+j_{ik}-i-k_2)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{ik} + j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (n - j_s - 2)!}{(l_s - j_s - 1)! \cdot (n - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_2, j_s\} \wedge$$

$$s > 3 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
& \frac{(n_s - n - 1)! \cdot (n - j_i)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(j_s - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_s - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (j_i)!} + \\
& \sum_{j_{ik}=j_{sa}^{ik}-s}^{D-n+l_s+s-1} \sum_{j_i=l_{ik}+n+s-D-j_{sa}^{ik}}^{(l_s-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_{ik}+j_{sa}^{ik}-D-j_{sa}^{ik})}^{(n_i+l_s+1)} \sum_{(n_i+l_s+1)}^{(n_i+l_s+1)} \sum_{(n_{ik}=n_{is}+j_{ik}-k_1)}^{()} \sum_{(j_i-k_2)}^{()} \frac{(n_i+l_s-j_i-k_2-j_{sa}^s)!}{(n_i-n-k_2+k_2)! \cdot (n_i+l_s+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 < j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_{ik} - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik-1}, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{z^{\mathcal{S}} \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_2} \sum_{(n_s=n-j_i+k_2)}^{(n_{is}-n_{ik}-k_2)} \\
 &\frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \\
 &\frac{(n_{is}-j_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \\
 &\frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_s-j_i-k_2)!} \\
 &\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 &\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 &\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 &\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 &\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 &\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - n_{is} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - n_{is} - 1)!}{(j_s - n_{is} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-j_i-l_i} \binom{D+l_s+s-j_i-l_i}{k} \sum_{j_{sa}^{ik}=1}^{j_{ik}-j_s-k} \binom{D+l_s+s-j_i-l_i}{j_{sa}^{ik}} \sum_{j_i=l_{ik}+n-D}^{l_s-j_{sa}^{ik}-k} \binom{l_s-j_{sa}^{ik}-k}{j_i} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \binom{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}{n_s} \cdot \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$j_i \geq n - \mathbb{k}_1 - \mathbb{k}_2 \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{j_s=1}^{D+l_s+s-n-l_i(l_{ik}+D-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n}^{l_{ik}-k+1} \sum_{j_i=j_{sa}^{ik}}^{(n_i-j_s+1)} \sum_{n_i=n+k}^{n_i+n+k} \sum_{n_{is}=n+k-j_s+1}^{(n_{is}+j_{ik}-k_1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_s+1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_s - n_{is} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - j_{ik} + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

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$$j_s \rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{(l_i - k + 1)} \sum_{j_{ik}=j_{i+}}^{(l_i - k + 1)} \sum_{j_s=l_s+s-k+}^{(l_i - k + 1)} \sum_{n=n+k}^{(n - j_s + 1)} \sum_{(n_{is}=n+k-j_s+1)}^{(n - j_s + 1)} \sum_{n_{ik}=n}^{(n_{ik} + j_{ik} - j_i - k_2)} \sum_{(n_s=n-j_{i+1})}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDÜMÜN

$$\begin{aligned}
 & \sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=1)}^{(l_i-i+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n_s - l_{k_2} - 1)!}{(i - j_{ik} - 1)! \cdot (n_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{j_s=1}^{()} \sum_{i=1}^{()} \sum_{i=s}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik} = j_{ik} + 1) n_s = j_{ik} - j_i - l_{k_2}}^{()} \sum_{(n_i + j_s - j_i - l_{k_1} - l_{k_2})!}^{()} \frac{(n - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} - s \wedge$
- $j_i + s - j_{sa}^{ik} \leq j_i \leq n) \vee$
- $(l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$
- $l_i \leq D + s - n) \vee$
- $(D \geq n < n \wedge l_i \leq D + s - n \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} - s \wedge$
- $(j_{ik} - j_{sa}^{ik} \leq j_i \leq n) \vee$
- $(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 & \sum_{i=2}^{l-1} (j_{ik} - j_{sa}^{ik} + \dots) \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} (j_i=s+1) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-s}^{(l_{ik+s} - j_{sa}^{ik} + 1)}$$

$$\sum_{n_{is}+j_{ik}-k_1}^{(n_i - j_s + 1)} \sum_{n_{ik}+k_2-j_{ik}}^{(n_{is}+k-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{i^l (j_s=1)}$$

GÜLDÜMÜŞ

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+j_{s_a}^{ik}-s} \binom{l_{ik}+s-i-l-j_{s_a}^{ik}+1}{j_i=s} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - l_{k_2})!} \cdot \\
 & \frac{(n_i + j_i - n - 1)! \cdot (n - j_i)!}{(n_{ik} - l_s - j_{ik} - 1)!} \\
 & \frac{(j_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{s_a}^{ik})!}{(D - l_i)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{i-l-1} \sum_{j_s=2}^{(j_{ik}-j_{s_a}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=j_{s_a}^{ik}+1}^{j_i+j_{s_a}^{ik}-s-1} \sum_{j_i=s+2}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}
 \end{aligned}$$

GÜLDÜZ

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - j_i - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{l-1} \frac{(l_s - k + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \sum_{j_i=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-1} \frac{(l_{ik}+s-k-j_{sa}^{ik}+1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
\end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_i} \sum_{s=2}^{(l_s - k + 1)}$$

$$\sum_{k=1}^{l_{ik} - l_s} \sum_{s=k - j_{sa}^{ik} + 2}^{(l_i - k + 1)}$$

$$\sum_{k=1}^n \sum_{s=k - j_s + 1}^{n - l_{ik} + k}$$

$$\sum_{k_2 = j_{ik} - l_{ik} + 1}^{n_{is} - j_{ik} - k_1} \sum_{s=n - j_i + 1}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

GÜLDÜZMÜŞA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i+1} \sum_{(j_i=j_{ik}-j_{sa}^{ik}+1)}^{(l_i-i+1)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_k)} \sum_{(n_s=n-j_i)}^{(n_{ik}+j_i-j_{ik}-l_k)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{ik} - l_k - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_i - n_s - j_i - l_k)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(l_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=s+1)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜMÜYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-k)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (j_i-l_i)!} \cdot \sum_{k=i}^n \sum_{\binom{()}{j_s=1}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{()}{j_i=s}} \sum_{n_i=n}^n \sum_{\binom{()}{n_{ik}=n_i-j_i-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}$$

$$D \geq n < n \wedge l_s < D - n - 1 \wedge 1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} = j_i + j_{sa}^{ik} - s \wedge j_{ik} + j_{sa}^{ik} = j_{sa}^{ik} \leq j_i - 1 \wedge l_{ik} - j_{sa}^{ik} + j_i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge l_i < D - j_{sa}^{ik} - n \wedge D \geq n < n \wedge l = \mathbb{k} > 0 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$s > 3 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathcal{S} \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}^{(j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - k} \sum_{(j_i = j_{sa}^{ik} + s - j_{sa}^{ik})}^{(n_i - 1)}$$

$$\sum_{n_i = \mathbb{k}}^{(n_i - 1)} \sum_{(n_{is} = n + \mathbb{k} - j_s)}^{(n_i - 1)}$$

$$\sum_{n_{ik} = n_{ik} - j_{ik} + 1}^{(n_{ik} - j_{ik} - \mathbb{k}_1)} \sum_{(n_s = n_s - j_i - \mathbb{k}_2)}^{(n_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_{ik} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - \mathbb{k} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{(j_s=2)}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{lk}-k+1}^{l_i+j_{sa}^{lk}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-1-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^l \sum_{(j_s=1)}^{()}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}}^{l_i+j_{sa}^{lk}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\binom{(\quad)}{(\quad)}$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{\quad}$$

$$\binom{(\quad)}{(\quad)}$$

$$\sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\quad}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{\quad} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\quad} \sum_{(j_i=s)}^{(\quad)}$$

GÜLDÜNYA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{()}{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^l - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \binom{(\quad)}{(\quad)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-j_s+1)}^{(n-j_s+1)}$$

$$n_{is} + j_s - j_{ik} - k_1 \quad (n_{is} - j_s + 1 - k_2)$$

$$\sum_{n_{ik}=n+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-1-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \binom{(\quad)}{(\quad)}$$

GÜLDENREINER

$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - n - \dots - k - 1)!}{(n_s - j_i - n - \dots - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - \dots - j_{sa}^{ik} + 1)!}{(\dots + l_{ik} - \dots - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}} \\
 & \sum_{j_{ik} = j_{sa}^{ik}}^{l_{ik} - i^{l+1}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{\binom{D}{l}} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_s = n - j_i + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left(\sum_{k=1}^{i-1} \sum_{s=2}^{j_k - j_{sa}^{ik} + 1} \right)$$

$$\sum_{k=1}^{l_s + j_{sa}^{ik} - l_i} \sum_{s=2}^{(l_i - k + 1) - j_{ik} + 1} (j_{ik} + s - j_{sa}^{ik} + 1)$$

$$\sum_{n_i=1}^n (n_{is} = n + k - j_s + 1)$$

$$\sum_{k_2 = j_{ik} - 1}^{n_{is} + j_{ik} - k_1} \sum_{n_s = n - j_i + 1}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik} - j_{sa}^{ik} + 1)}^{(l_i - k + 1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_2}} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{i^l (j_s=1)}^{()}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-l+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-l+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_1 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i - j_i - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}{(l_{ik} - j_{sa}^{ik} - l_{ik} + s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDEN

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}^{ik}} \sum_{(j_i=s)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{ik}=n_i-j_{ik}^{ik}-1)} \sum_{(n_s=n_{ik}+j_{ik}^{ik}-k_2)}$$

$$\frac{(n_i + j_i - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - j_i - k_1 - k_2 - j_{sa}^s)! \cdot (n + j_i - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{ik}^{ik} + 1 > l_s - j_{sa}^{ik} + j_{sa}^{ik} - s = l_s \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_s - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, k_2\} \wedge$$

$$s \geq 3 \wedge j_{sa}^s = s + k \wedge$$

$$k_z: z = 2, k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-j_s-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{lk}}^{l_i+j_{sa}^{lk}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!}$$

GÜLDENWA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=0}^{n-k+1}$$

$$\sum_{j_{ik}=0}^{n_i} \sum_{j_{sa}^{ik}=0}^{j_{ik}-1} \binom{(\quad)}{j_i = j_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l}^{(\quad)} \sum_{j_s=1}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{j_i=s}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

GÜLDÜNYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge s = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-1)}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{is}-k_2)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{is}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

GÜLDÜZÜM

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} - 1)!}{(l_{ik} - j_{ik} - 1)! \cdot (j_{ik} - 1)!} \cdot \\
& \left(\frac{(D - l_s - 1)!}{(D - n_i - n_s - 1)! \cdot (n - j_i)!} \right) + \\
& \left(\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right) \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_s-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=2}^{l_s-k+1}$$

$$\sum_{j_{ik}=1}^{l_{ik}} \sum_{j_i=1}^{l_i+1}$$

$$j_{ik}^{ik} (j_i = j_{ik} + s - j_{sa}^{ik} + 1)$$

$$\sum_{n+l_k}^n \sum_{n_{ik}=l_{k_2}-j_{ik}+1}^{j_{ik}-l_{k_1}+1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=2}^{l_s-k+1}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_{sa}^{ik}+1}^{j_{sa}^i} \sum_{j_{sa}^s}^{(l_s+s-k)} \sum_{j_{ik}=j_i+j_{sa}^s}^{(n-D)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

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$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i(l_s-k+1)} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_s+s-k+1) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_s=n-j_i+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_i+n-D) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_i)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_i - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{l(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i - l+1)} \sum_{(j_i=l_i+\mathbf{n}-D)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{(j_s=j_i+j_{sa}^s, \dots)}$$

$$\sum_{(n_i-j_s+1, \dots)}$$

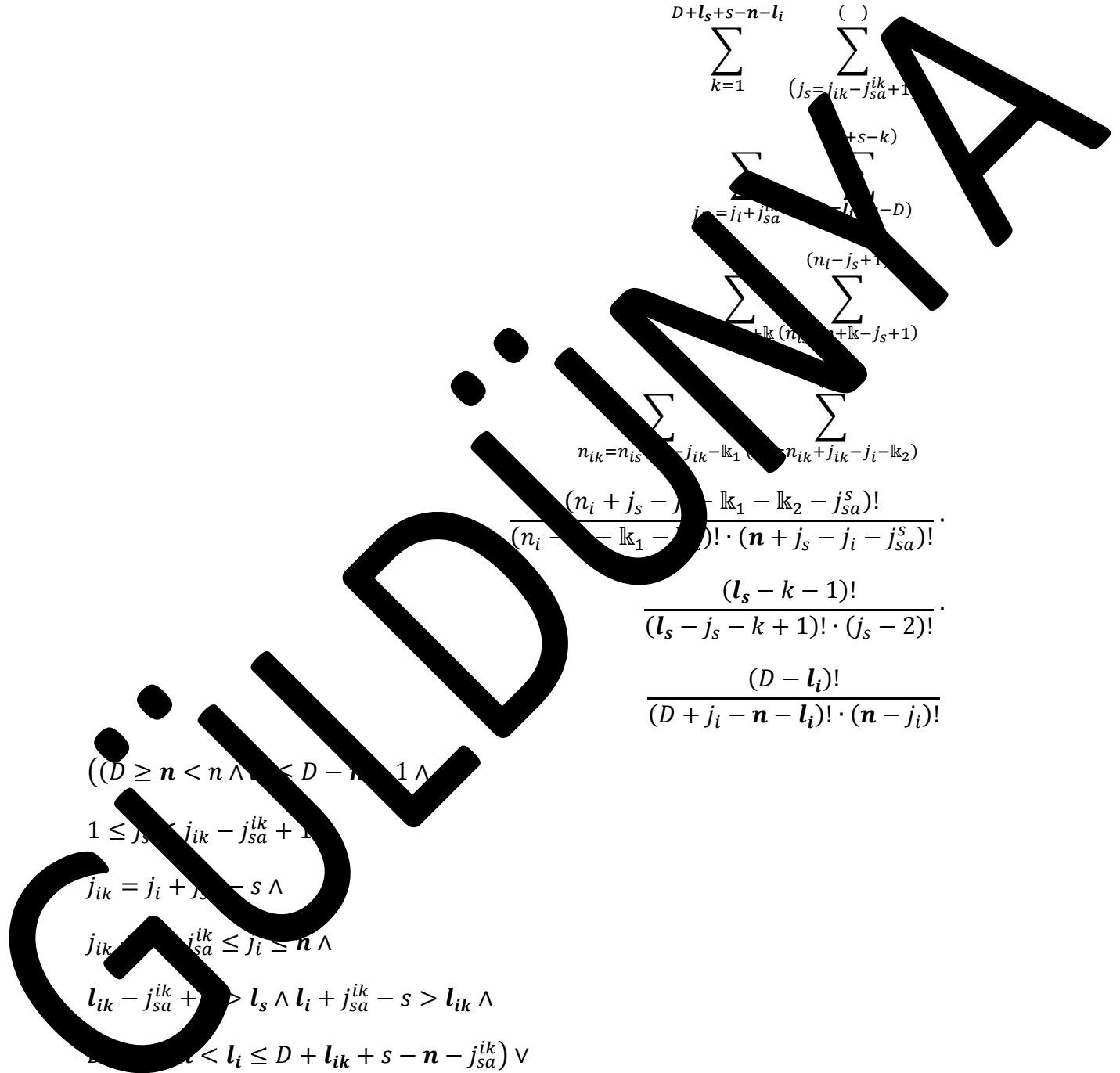
$$\sum_{(n_{ik}=n_{is}, \dots)}$$

$$\frac{(n_i + j_s - j_{ik} - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - j_{ik} - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \\ & j_{ik} = j_i + j_{sa}^s - s \wedge \\ & j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\ & l_i < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee \\ & (D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \\ & j_{ik} = j_i + j_{sa}^{ik} - s \wedge \end{aligned}$$



$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{j_{ik}, j_i} = \binom{l_{ik} + s - n - l_i - j_{sa}^{ik} + 1}{k=1} \binom{j_{ik} - j_{sa}^{ik} + 1}{k=2} \sum_{k=J_i + j_{sa}^{ik} - s}^{(l_s + s - k)} \sum_{(j_i = l_i + n - D)}^{(n_i - j_s + 1)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_i - n_{is} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{(n_{ik}+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_i-n_{is}-1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

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$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_i-n_{is}+1)! \cdot (n_{is}+j_{ik}-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_{ik} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - j_{ik} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D}^{i^{l-1}} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=i}^{(j_s)} \frac{(l_i - i + 1)!}{(j_{ik} + n - D) \cdot (j_i + n - D)} \cdot \\
& \sum_{n+l_k}^n \sum_{(n_{ik}=k_2-j_{ik}+1)}^{j_{ik}-k_1+1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s)}
\end{aligned}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+l_1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_i-j_i-l_{k_2})}^{(\cdot)} \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-l_i-j_i-l_{k_2})! \cdot (j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+l_s+n-l_i)! \cdot (n-j_i)!}{(D+l_s+n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D > n < n \wedge l_i = l_i > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, l_{k_2}, j_i\} \wedge$$

$$s < s \wedge l_i = s + l_k \wedge$$

$$l_{k_z}: z = 2, l_k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_i-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} - 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=0}^{l_s - k + 1} \sum_{j_s=2}^{D + l_s + s - n - l_i + 1} \\
 & \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - k - s + 1}^{l_i + j_{sa}^{ik} - k - s + 1} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$l_i + j_{sa}^{ik} - s + 1$$

$$\sum_{(j_{sa}^{ik} - D - s = j_{ik} + s - j_{sa}^{ik})}$$

$$j_{sa}^{ik} - D - s = j_{ik} + s - j_{sa}^{ik}$$

$$n_i - n_{ik} - 1$$

$$\sum_{(n_i = n + k_1 - 1)}$$

$$n_i = n + k_1 - 1$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$(n_s - k_2 - 1)!$$

$$\frac{(n_s - k_2 - 1)!}{(j_i - k_2 - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$(n_s - 1)!$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$(l_{ik} - l_s - j_{sa}^{ik} + 1)!$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$(D - l_i)!$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D + l_s + s - n - l_i$$

$$\sum_{k=1}$$

$$()$$

$$\sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$l_s + j_{sa}^{ik} - k$$

$$\sum_{(j_{ik} = l_i + n + j_{sa}^{ik} - D - s)}$$

$$j_{ik} = l_i + n + j_{sa}^{ik} - D - s \quad (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$n$$

$$\sum_{n_i = n + k}$$

$$(n_i - j_s + 1)$$

$$\sum_{(n_{is} = n + k - j_s + 1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge s = \mathbb{k} > 1 \wedge$$

$$j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 5 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_2: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-k_1}^{(n_{is}-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_s-j_i+1)} \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!} \cdot \frac{(n_{is}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_{ik}-j_{sa}^{ik})} \right)$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_{k_2} - 1)!}{(n_s - j_i - n - l_{k_2} - j_i)!} \cdot \\
 & \frac{(n_i - j_s - n - l_{k_2} - 1)!}{(n_i - j_s - n - l_{k_2} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_i + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)
 \end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_s - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_i-j_s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=0}^{D+l_{ik}+s-n-l_i-j_{ik}+1} \sum_{j_s=2}^{(n-k+1)} \sum_{j_{ik}=l_s+j_{sa}^{ik}+1}^{n-k+1} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}^{i^l-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_i=l_{ik}+n-l_i-j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_i=D)}^{(l_s-k+1)}$$

$$\sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+l_{k_2}-j_{ik})}^{(n_{ik}+l_{k_2}-j_{ik})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^n \sum_{i=1}^{\binom{D}{k}} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{(j_i=l_i+n)}^{(l_i-i+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_s=j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - 1)!} \cdot \\
 & \frac{(n - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_i - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D}{k}} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{D}{k}} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{\binom{D}{k}}
 \end{aligned}$$

GÜLDÜSÜMBA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D-s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{n-l_i} \\
 & \sum_{k=j_s+j_{sa}^{ik}-1}^{l_i} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{n_{is}+j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\sum_{n_{ik}+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{k_2} - l_s - j_{ik} - 1)!}{(l_{k_2} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \binom{(\quad)}{\quad} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(\quad)}{\quad} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜM

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k}$$

$$\mathbb{k} = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=0}^{D+l_{ik}+s-l_i-j_{sa}^{ik}+1} \frac{(l_s - k + 1)!}{\sum_{j_s=l_i+n-D-s+1}^{l_s-k+1} \binom{l_s-k+1}{j_s}} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{\binom{l_s-k+1}{j_i}} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \left(\sum_{k=2}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{k=2}^{+n-D-s} \right) \\
& \sum_{l_i+n-D}^{j_i+j_{sa}^{ik}-1} \sum_{l_i+n-D}^{(l_{ik}+s-k+1)} \\
& \sum_{n_i}^n \sum_{n_i}^{l_i} (n_{is} = n + k - j_s + 1) \\
& \sum_{n_{ik} = k_2 - j_{ik} + 1}^{n_{is} - j_{ik} - k_1} \sum_{(n_{ik} + j_{ik} - j_i - k_2)} \\
& \sum_{(n_s = n - j_i + 1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+j_{ik}-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+l_{k2}-j_{ik}}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - l_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+lk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-lk_1} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-lk)} \\
 & \frac{(n_i-1)!}{(j_s-2)!(n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-j_{sa}^{lk}-n_{is}+n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-j_{ik}-lk_2-1)!}{(j_i-j_{ik}-1)!(n_{ik}-j_{ik}-n_s-j_i-lk_2)!} \cdot \frac{(n_i-1)!}{(n_s-j_i-n-1)!(n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)!(j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_i+l_{ik}-j_{ik}-l_s)!(j_{ik}-j_s-j_{sa}^{lk}+1)!} \\
 & \frac{(l_i+j_{sa}^{lk}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})!(j_i+j_{sa}^{lk}-j_{ik}-s)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)!(n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{lk}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+lk}^n \sum_{(n_{is}=n+lk-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - \mathbf{n} + 1)! \cdot (n - j_i)!}{(n_s + j_i - \mathbf{n} + 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - j_{ik} - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=l_i+\mathbf{n}-D)}^{(l_i-i^{l+1})} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+k}^{(n-j_s)} \binom{()}{j_{ik} - j_{sa}^{ik} - 1} \binom{()}{j_i = j_{ik} + s - j_{sa}^{ik}} \\
& \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \cdot \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()} \\
& \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \frac{\sum_{l_s=2}^{D+l_s+s-n-l_i} \sum_{j_{sa}^{ik}=2}^{k-j_{sa}^{ik}+1} \sum_{j_i=2}^{n+l_s+l_i} \sum_{j_{sa}^i=2}^{n+s-D-j_{sa}^{ik}} \sum_{n_i=2}^{n+l_s+l_i} \sum_{n_{is}=2}^{n+l_s+l_i} \sum_{n_{ik}=2}^{n+l_s+l_i} \sum_{n_{ik}=2}^{n+l_s+l_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i-1)}^{n_{is}+j_s-j_{ik}-1} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - k - 1)!} \cdot \\
 & \frac{(n_i - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n_i + l_{i_k} - j_{i_s} - n - l_i - j_s)! \cdot (j_{i_k} - j_s - j_{i_s}^k + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{(j_s)} \sum_{l=1}^{(j_s)} \\
 & \sum_{j_{i_k}=j_i+j_{i_s}^k-s}^{(l_{i_k}+s-l-j_{i_s}^k+1)} \sum_{(j_i=l_{i_k}+n+s-D-j_{i_s}^k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_k}=n+l_{k_2}-j_{i_k}+1)}^{(n_i-j_{i_k}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{i_k}+j_{i_k}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{i_k} - 1)!}{(j_{i_k} - 2)! \cdot (n_i - n_{i_k} - j_{i_k} + 1)!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-s}^{l_s+l_i} \binom{l_s+l_i}{j_i=j_{ik}+j_{sa}^{ik}+n+s-D-j_{sa}^{ik}}$$

$$\sum_{n_i+l_k}^{n_i+l_s+1} \binom{n_i+l_s+1}{n_i+l_k} \binom{n_i+l_s+1}{n_i+l_k-j_s+1}$$

$$\sum_{=n_{is}+j_{ik}-k-k_1} \binom{D+l_s+s-n-l_i}{=n_{is}+j_{ik}-k-k_1} \binom{D+l_s+s-n-l_i}{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i + n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)} \dots$$

$$\sum_{j_{ik}=l_{ik}+k}^{l_s+j_{sa}^{ik}-k} \dots$$

$$\sum_{(n_i-j_s+1)}^{(n_i-j_s)} \dots$$

$$\sum_{(n_s-n-j_i+1)}^{(n_s-n-j_i)} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i(l_s-k+1)} \sum_{(j_s=2)}^{(j_s-1)} \dots$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_1)} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_i - l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k = D + l_s + s - n - l_i + 1}^{i^{l-1}} \sum_{(j_s = 2)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = l_{ik} + n - D}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - l_{ik} - 1)!}{(l_s - j_s - l_{ik} - 1)! \cdot (l_s - j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_s - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=i}^{(\cdot)} \sum_{l=(j_s=1)}^{(\cdot)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + \dots - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - \dots - j_{sa}^s)!}$$

$$\frac{(l_i - k - 1)!}{(l_i - j_s - \dots + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n \wedge l_i \leq D - n - 1$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = l_{ik} + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq l_i \leq n \wedge$$

$$l_{ik} = j_{sa}^{ik} + 1 > l_s \wedge l_{ik} + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} + s - j_{sa}^{ik} < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l_s \leq D - n \wedge l_i \leq D - n - 1$$

$$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$\{j_{sa}^s, \mathbb{k}_1, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{Z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_{ik}-j_{sa}^{ik}-k_2)} \\
 &\quad \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{ik} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 &\quad \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \\
 & \frac{(n_s - j_{ik} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

GÜLDENKA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_{ik} - l_s + 1} \sum_{j_s=1}^{(n - j_i - k)}$$

$$\sum_{j_i = l_{ik} + n - D}^{l_{ik} - l_s + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}$$

$$\sum_{n_i = n + \mathbb{k}}^{(n_i - n_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{n_s = n - j_i + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D + l_s + s - n - l_i} \sum_{(j_s = l_{ik} + n - D - j_{sa}^{ik} + 1)}^{(l_s - k + 1)}$$

GÜLDÜM YA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D + l_s - n - l_i)! \cdot (n - j_i)!}{(D + l_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_i + j_{sa}^{ik} - s = l_i \wedge$

$D > n < n \wedge l_s = l_k > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$

$s > 3 \wedge s = l_{k_1} + l_{k_2} \wedge$

$l_{k_2} = l_s - l_{k_1} \wedge l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - k - 1)!} \cdot \\
 & \frac{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - j_{i_k} - j_{s_a}^{i_k} + 1)!}{(n_{i_k} + l_{i_k} - j_{i_k} - j_s)! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_i+l_{i_k}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_i = D + l_s + s - l_i + 1}^{D - n + 1} \sum_{j_s = l_s + n - D}^{l_i + 1} \sum_{j_{ik} = j_i + l_{ik} - l_i}^{l_i - k + 1} \sum_{j_i = l_i + n - D}^{l_i - k + 1} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜMBA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{j_s=j_i+l_{ik}}^{j_s=j_i+l_{ik}+s-k} \binom{()}{(j_s=j_i+l_{ik}, \dots)}$$

$$\sum_{n+l_{ik}}^{n+l_{ik}+j_s+1} \binom{()}{(n+l_{ik}, \dots)}$$

$$\sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{n_{ik}=n_{is}-j_{ik}-l_{k_1}+n_{ik}+j_{ik}-j_i-l_{k_2}} \binom{()}{(n_{ik}=n_{is}-j_{ik}-l_{k_1}, \dots)}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - j_i - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s = D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_s - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i - l_{k_1} \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$n - j_i - l_{k_1} - l_{k_2} \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_i}^n \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\sum_{(n_i+j_s-j_{ik})}^{(n_{ik}+j_{ik}-j_{ik})} \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{is} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i - k - 1)!} \cdot \\
 & \frac{(n_s - j_s - n - l_i - j_s - 1)! \cdot (j_s - 2)!}{(l_{ik} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}{(D - l_i)!} + \\
 & \frac{(D + j_i - n - l_i)! \cdot (n - j_i)!}{\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - l_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1) \cdot \sum_{j_i = n + j_{sa}^{ik} - D - s}^{l_s - j_{sa}^{ik} - k} \binom{()}{j_i = j_{ik} + l_i - l_{ik}} \cdot \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \cdot \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()}. \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{l_s+s-n+l_i} \sum_{(j_s=l_s+n-D)}^{(j_i=n-s)} \sum_{(j_{sa}^{ik}=l_i+l_i)}^{(j_{sa}^{ik}=l_i+l_i)} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(j_i=j_{ik}+l_i-l_{ik})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜNKYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{(n_{ik}+l_{k2}-j_{ik})}^n \sum_{(n_{is}=n_{ik}+j_{ik}-j_i-l_{k2})}^{(n_{is}+1)}$$

$$\sum_{(n_{ik}+l_{k2}-j_{ik})}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n_{ik}+j_{ik}-j_i-l_{k2})}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - k - 1)!} \cdot \\
 & \frac{(n_i - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n_i + l_{i_k} - j_{i_s} - l_i - j_s)! \cdot (j_{i_k} - j_s - j_{i_s}^k + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_s+j_{i_s}^k-1} \sum_{(j_i=j_{i_k}+l_i-l_{i_k})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n_{i_k}+j_{i_k}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{i_s}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{i_s}^s)!}
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S \Rightarrow j_s, j_{ik}, j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(D + j_s - n - l_i)! \cdot (j_i - j_s - l_i)!} + \\
& \sum_{k=0}^{D+l_s+n-l_i} \sum_{l=0}^{l_s-k+1} \sum_{j_i=n-D}^{l_s+n-D} \frac{(l_{ik}+s-k-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-l_i)! \cdot (j_i=l_s+s-k+1)!} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n-s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_2}} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n - n_{is} - 1)!}{(n - 2)! \cdot (n - n_{is} - j_s + 1)!}$$

$$\frac{(n - n_{ik} - 1)!}{(n - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - l_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^s, \mathbb{k}_1, j_{sa}^s, \dots, \mathbb{k}_2, j_{sa}^s\} \wedge$$

$$s > 3 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_1 + \dots \Rightarrow$$

$$f_{z^S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_s + s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{j_{ik} = l_{ik} + s}^{D - n + l_{ik} + s} \sum_{j_s = l_s + n - D}^{(l_s - k + 1)} \sum_{j_i = l_{ik} + n - D}^{(n - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^n \sum_{(n_{is} = n + \mathbb{k}_2 - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=l_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n_{is}+1)}^{(n_i+l_i+1)}$$

$$\sum_{n_{ik}=n_{is}+l_{ik}-k_1}^{()} \sum_{(j_i=l_{ik})}^{()}$$

$$\frac{(n_i+l_i-j_i-l_{ik_2}-j_{sa}^s)!}{(n_i-n-k_1-k_2)! \cdot (n+l_s+j_s-j_i-j_{sa}^s)!}$$

$$\frac{(l_s-k-1)!}{(l_s+j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^{ik-1}, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 f_{Z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+k_2-1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{i_2}=n_{ik}-j_{i_2}-k_2)}^{(n_{i_2}+j_{i_2}-l_{i_2}-k_2)} \\
 &\quad \frac{(n_i - n_{i_2} - 1)!}{(j_s - 2)! \cdot (n_{i_2} + j_s + 1)!} \cdot \\
 &\quad \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_2} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\quad \frac{(n_{ik} - n_{i_2} - k_2 - 1)!}{(j_i - j_{i_2} - 1)! \cdot (n_{i_2} + j_{i_2} - n_s - j_i - k_2)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(j_{ik}-j_s)} \sum_{n_i=j_s+j_{sa}^{ik}-1}^n \sum_{n_s=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_s=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_i} = \sum_{k=1}^{l-1} \binom{j_{sa}^{ik}+1}{j_s} \binom{l-s-k}{j_{ik}-j_s} \binom{n_i-j_s+1}{n_i+n+k} \binom{n_i+n+k}{n_i+n+k-j_s+1} \binom{n_i+n+k-j_{ik}-k_1}{n_{is}+j_{ik}-k_1} \binom{n_{ik}+j_{ik}-j_i-k_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{(l_i - k + 1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - k + 1)} \sum_{(j_i=l_s+s-k+1)}^{(l_i - k + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_i+j_{ik}-l_i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_i+j_{ik}-l_i-k_2)} \sum_{(n_s=n-j_i+1)}^{(n_i+j_{ik}-l_i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - l + 1)} \sum_{(j_i=s)}^{(l_i - l + 1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{\substack{(n_i-j_{ik}-l_{k_1}+1) \\ (n_{ik}=n+l_{k_2}-j_{ik}+1)}} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_1})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_{ik} - l_s - j_{sa})!}{(l_{ik} - j_{ik} - l_{k_1} + 1)! \cdot (j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{l-1} \sum_{\binom{()}{j_s=j_{ik}-j_{sa}^k+1}} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{\binom{(l_s+s-k)}{j_i=s+1}} \\
 & \sum_{n_i=n+l_k}^n \sum_{\binom{(n_i-j_s+1)}{n_{is}=n+l_k-j_s+1}} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=l}^{\binom{()}{l}} \sum_{\binom{()}{j_s=1}}
 \end{aligned}$$

GÜLDÜNYA

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^{s-1}, j_{sa}^{ik}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 3 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_i - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

GÜLDENKA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j_s=1}^{(n - j_i - k)} \sum_{n_i=n+\mathbb{k}}^{(n_i - k - \mathbb{k}_1 + 1)} \sum_{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{n_s=n - j_i + 1}^{(n_s - j_i + 1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{(n - j_i - k)}$$

GÜLDÜMÜYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 - j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 & f_{z \Rightarrow i} S_{i, j_i} \sum_{k=1}^{l-i-k+1} \sum_{j_i}^{j_i - k + 1} \binom{l-i-k+1}{j_i - k + 1} \\
 & \sum_{j_i}^{l_i + j_{sa}^{ik} - k - 1} \sum_{j_i}^{j_i - l_{ik}} \binom{l_i + j_{sa}^{ik} - k - 1}{j_i - l_{ik}} \\
 & \sum_{n_i = n + k}^{n_i - j_s + 1} \sum_{n_{is} = n + k - j_s + 1}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_s - n_s - l_{k_2} + 1)!}{(i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}
 \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)} \sum_{l_i=1}^{(j_s - k)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k+l_i-1}^{(j_s - k + 1) n_s = n + j_{ik} - j_i - l_{k_2}} \frac{(n_i - n - l_{k_2} + j_s - j_i - l_{k_1} - l_{k_2})!}{(n_i - n - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(n - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} -$
- $j_{ik} + s - j_{sa}^{ik} < j_i \leq n$
- $l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_{sa}^{ik} - s = l_{k_2} \wedge$
- $D + s - n < l_i \leq D + s - n - 1 \wedge$
- $D \geq n < n - l_i = l_{k_2} > 0 \wedge$
- $j_{sa}^{ik} - j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, l_{k_1}, \dots, l_{k_2}, j_{sa}^i\} \wedge$
- $j_{sa}^s = s + l_{k_2} \wedge$
- $l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-j_{ik}-l_{k_2})!}{(j_i-j_{ik}-l_{k_2})! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (l_s - j_s - 2)!} \cdot \\
& \frac{(l_{jk} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=0}^{l_i} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i-k+1)} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{\binom{D+l_s+s-n-l_i}{j_s=1}}$$

$$\sum_{j_i=l_i+l_{ik}}^{\binom{l_i-1}{j_i=l_i+n-D}}$$

$$\sum_{n_i=n+l_{ik_1}}^{\binom{n}{j_{ik}-l_{k_1}+1}} \sum_{n_s=n+l_{k_2}}^{\binom{n}{j_i-l_{k_2}}} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

$$\frac{(n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\binom{D+l_s+s-n-l_i}{j_s=1}}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i}^{\binom{l_s+s-k}{j_i=l_i+n-D}}$$

$$\sum_{n_i=n+l_{k_1}}^n \sum_{(n_{is}=n+l_{k_1}-j_s+1)}^{\binom{n_i-j_s+1}{n_{is}=n+l_{k_1}-j_s+1}}$$

GÜLDENYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 =$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_{ik} - k_2)!} \cdot \\
 & \frac{(n_s - j_{ik} - 1)!}{(n_s + j_{ik} - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=D+l_s+1}^n \sum_{j_s=2}^{l_s-k+1} \sum_{j_{ik}=l_i}^{l_i+j_{sa}^{ik}-1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{j_{sa}^{ik}-1} \binom{n_i - j_s + 1}{n_{is}=n+\mathbb{k}_2 - j_s + 1} \binom{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}{n_s = n - j_i + 1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n+l_k-j_i-l_{k_2})}^{(n_{ik}+j_i-j_i-l_{k_2})}$$

$$\frac{(n_i - j_{ik} - l_{k_1} - 1)!}{(j_i - j_{ik} - l_{k_1} - 1)! \cdot (n_i - l_{k_1} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - j_i - l_{k_2} - 1)!}{(j_i - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - l_{k_2} - n_s - j_i - l_{k_2})!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_{ik} - j_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

GÜLDÜZÜMÜYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Delta} (j_s - n - l_i - 1) \\
 & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{is}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \dots$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_{sa}^{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} + j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_{ik} - l_s - 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s} \sum_{(j_s=2)}^{n-l_i(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{j_s=2}^{l_s-k+1} \frac{(l_{ik} + j_s - 1)!}{(j_s + l_{ik} - l_i - j_s + 1)! \cdot (l_s + s - k + 1)!} \cdot \\
 & \sum_{n_{is}=n+k-j_s+1}^{n_{is}+k} \frac{(n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \sum_{n_{ik}=1}^{n_{ik}+k} \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

GÜLDENMYA

$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik}+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_{ik}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_s-j_{ik}-l_{k_1}+j_{ik}-l_{k_2})} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-l_{ik}-1)!}{(j_{ik}-j_s+1)! \cdot (n_{is}-j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-l_i-j_{sa}^{ik}+1)}
 \end{aligned}$$

GÜLDÜZYAN

$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_i - l_s - j_{sa})!}{(l_{ik} - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - \mathbb{k})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-k)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z = \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{l_s+j_{sa}^{ik}-l_{ik}+n-D} \binom{(\cdot)}{(j_i=j_{ik}+l_i-l_{ik})} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+l_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_{ik}=l_{ik}-l_s+l_{sa}^{ik}-k+1)}^{(n_i-j_s+l_{sa}^{ik}-k+1)}$$

$$\sum_{(n_i+l_k)}^{(n_i+l_k-j_s+1)} \sum_{(n_i+l_k)}^{(n_i+l_k-j_s+1)}$$

$$\sum_{(n_i+l_k-j_{ik}-1)}^{(n_i+l_k-j_{ik}-1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

GÜLDÜMÜS

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} + 1)!}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - j_{ik} - l_{k_2})!}{(j_i - j_{ik} - l_{k_2})! \cdot (n_{ik} - j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - j_i - 1)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s - l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!}$$

GÜLDÜZMAYA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{D+l_s+s} \sum_{j_s=j_{ik}-j_{sa}^{ik}}^{j_{ik}-k} \sum_{j_{ik}=j_{ik}+n-D}^{j_{ik}+n-D} \sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}} \sum_{n_s=n+\mathbb{k}-j_s+1}^{n_i-j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(l_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l_s \leq D - n + 1 \wedge 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_{ik} - j_{sa}^{ik} - s \wedge j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s = j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 3 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \frac{\sum_{k=0}^{D+l_s+s-n-l_i} \sum_{(j_s-2)}^{(n-D-j_{sa}^{ik})} \sum_{i_{ik}=l_{ik}+n-k+1}^{i_{ik}=j_{ik}+l_i-l_{ik}} \sum_{i_s=0}^{n-l_i-l_s+1} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{ik}=n+\mathbb{k}-j_s+1} \sum_{n_{is}=n-j_{ik}-\mathbb{k}_1}^{n_{is}=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_{ik}=n-k_2-j_{ik}+1}^{n_{is}=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜMNYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_s=n-j_i+l_{k_2})}^{(n_i+j_{ik}-l_{k_2})} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \\
 & \frac{(n_{ik} - n_{k_2} - 1)!}{(j_i - j_{k_2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_s)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{(\dots)} \sum_{l=1}^{(\dots)} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_i+l_{ik}-l_{ik})} \sum_{(n_i+l_{ik}-l_{ik})}^{(n_i+l_{ik}-l_{ik})} \frac{(n_i+l_{ik}-l_{ik})!}{(n_i - n - l_{ik} + l_{ik})! \cdot (j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{Z^S \Rightarrow j_s, j_{ik}, j_i} = & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-}^{(n_i-j_s+1)} \sum_{(n_s=n-j_i-)}^{(n_i-j_s+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s+s-j_i} \binom{D+l_s+s-j_i}{k} \sum_{j_{sa}^{ik}=1}^{(j_{ik}-j_s-k)} \binom{j_{ik}-j_s-k}{j_{sa}^{ik}+1} \\
& \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=l_i+n-D)}^{(n-j_s+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(j_s-k-1)!} \\
& \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$n \geq n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$

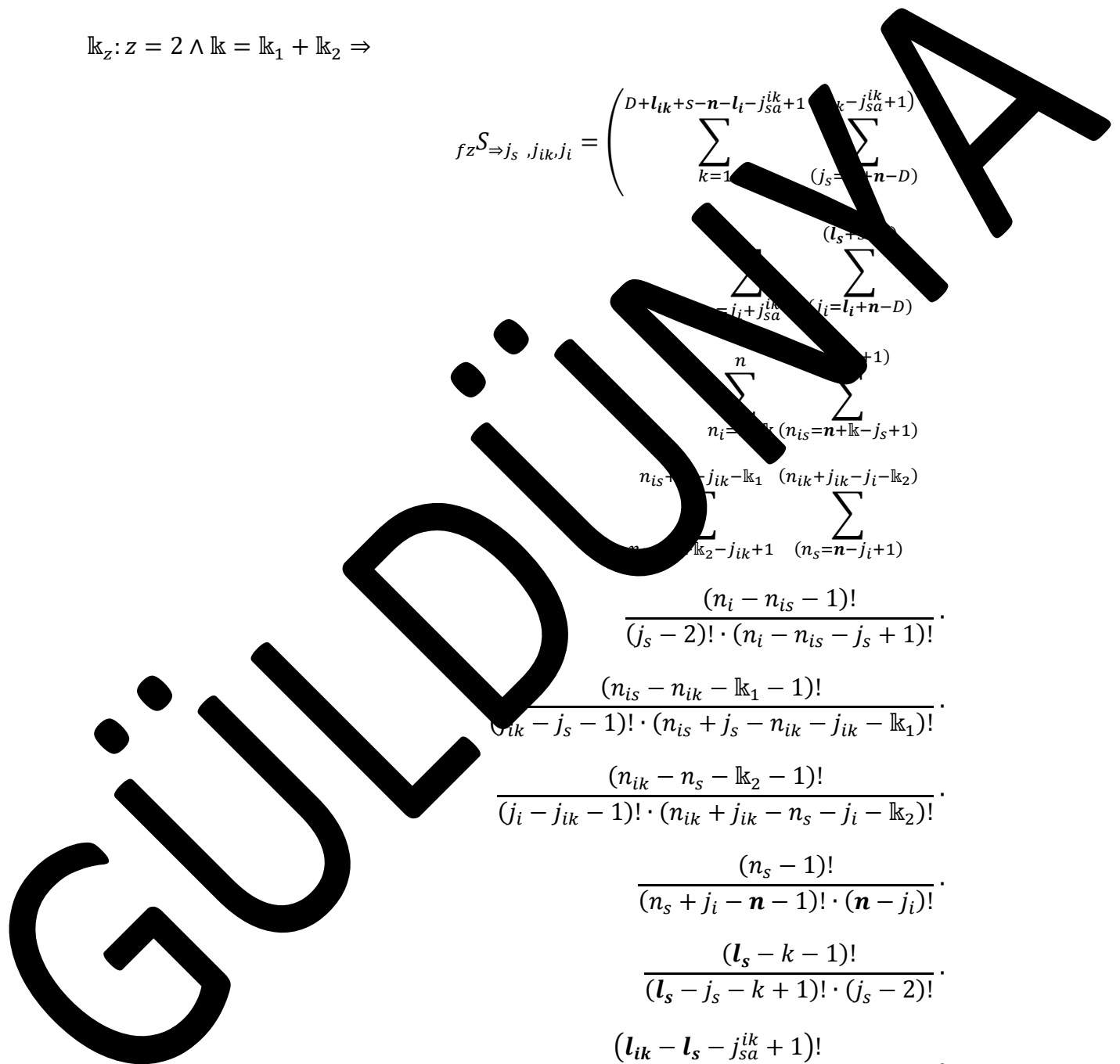
$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=j_{sa}^{ik}-k-j_{sa}^i+1)}^{(l_s-j_{sa}^i+1)} \sum_{(i=j_i+j_{sa}^{ik})}^{(i=l_i+n-D)} \sum_{n_i=j_{sa}^{ik}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_{is}=n-j_{sa}^{ik}+1)} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_1)} \sum_{(n_s=n-j_{ik}+1)}^{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) +$$



$$\begin{aligned}
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_s+1)} \\
 & \frac{(n_s-n_{is}-1)!}{(j_s-2)! \cdot (n_{is}+j_s+1)!} \\
 & \frac{(n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_s-j_i-k_2)!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \left. \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \right)
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - k - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - j_i - n + l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
 & \sum_{k=D+l_{ik}}^{D-n+1} \sum_{j_i=l_i+n-D}^{l_s-k+1} \frac{(l_s-k+1)!}{(j_i+l_i-n+D)!} \cdot \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \frac{(l_i-k+1)!}{(j_i+l_i-n+D)!} \cdot \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-1)!} \cdot \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(n-j_s+1)} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s < j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^{ik} > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_i \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_i}^n \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_{ik}-j_{ik})} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-j_{ik})}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - l_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1) \cdot \sum_{j_i = n + j_{sa}^{ik} - D - s}^{j_{sa}^{ik} - k} \binom{()}{j_i = j_{ik} + s - j_{sa}^{ik}} \cdot \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \cdot \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \binom{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1}{k=1} \binom{j_s-l_s+n-D}{j_s=l_s+n-D} \binom{j_{sa}^{ik}-k}{j_{sa}^{ik}-k} \binom{j_i+l_s+n-j_{sa}^{ik}-s}{j_i=j_{ik}+s-j_{sa}^{ik}} \sum_{n_i=n+k}^n \sum_{n_{is}=n+k-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

GÜLDÜNKYA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=l_s+j_{sa}^{ik})}^{(\quad)} \\
 & \sum_{(n_{is}=n_{is}+1)}^{n} \sum_{(n_{is}=n_{is}+1)}^{(n_{is}+1)} \\
 & \sum_{(n_{ik}+l_{k2}-j_{ik})}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k2})} \\
 & \frac{(j_i - l_{k1} - 1)! \cdot (n_{is} - j_s + 1)!}{(j_i - l_{k1} - 1)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{is} - l_{k1} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k1})!} \\
 & \frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - l_{k2} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \right)
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(j_i - j_s - n - 1)! \cdot (j_s - 2)!}{(l_{i_k} - j_{i_s} - j_{i_s}^{i_k} + 1)!} \cdot \\
 & \frac{(j_i + l_{i_k} - j_{i_s} - j_{i_s}^{i_k})! \cdot (j_{i_k} - j_s - j_{i_s}^{i_k} + 1)!}{(j_i + l_i - l_i - j_i - l_{i_k})! \cdot (j_i + j_{i_s}^{i_k} - j_{i_k} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{i_k}+s-n-l_i-j_{i_s}^{i_k}+1} \sum_{(j_s=l_s+n-D)}^{(j_{i_k}-j_{i_s}^{i_k}+1)} \\
 & \sum_{j_{i_k}=l_i+n+j_{i_s}^{i_k}-D-s}^{l_s+j_{i_s}^{i_k}-k} \sum_{(j_i=j_{i_k}+s-j_{i_s}^{i_k}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})}
 \end{aligned}$$

GÜLDÜZYA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa} - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - j_i - 1)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
 & \sum_{k=D+l_{ik}}^{D-n+1} \sum_{j_i=l_i+n-D}^{l_s-k+1} \frac{(l_s-k+1)!}{(j_i+l_i-n-D)!} \cdot \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_i-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \frac{(l_i-k+1)!}{(j_i+l_i-n-D)!} \cdot \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i-j_s+1)!}{(n_i-n_{is}-1)!} \cdot \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
 & \frac{(n_{ik}-n_s-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜNYA

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(n_{is}+\mathbb{k}-j_s+1)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - j_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > 0 - n + \dots \wedge$

$2 \leq j_s < j_{ik} - j_{sa}^{ik} + 1$

$j_{ik} = j_i + j_s - s \wedge$

$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D > n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$$\mathbb{k}_Z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-k-s+1}^{(l_i+j_{sa}^{ik}-k-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s+1)} \sum_{n_i=n+1}^n \sum_{(n_i+j_s-j_{sa}^{ik}-\mathbb{k}_1)}^{(n_i+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)} \sum_{i_{ik}+1}^{(i_{ik}+1)} \sum_{=n-j_i+1}^{(n-j_i+1)} \frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - i_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - j_s - \mathbb{k}_2 - 1)!}{(n_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_i+j_{sa}^{ik}-k-s+1)} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_s+1)}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMBA

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D-s-n-l_i} \sum_{j_s=l_i+n-D-s+1}^{(1)} \\
 & \sum_{k=j_s+j_{sa}^{ik}-1}^n \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i}^S = \binom{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1}{\sum_{k=1}^{D+l_{ik}+s-j_{sa}^{ik}-l_i-j_{sa}^{ik}+1}} \binom{n-s}{\sum_{j_s=l_s+n-D}^{n-s}}$$

$$\binom{l_{ik}-j_{sa}^{ik}+1}{\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-j_{sa}^{ik}+1}} \binom{n-j_i}{\sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n-j_i}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D-s+1)}^{(n_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{(n_{ik}+s-j_{sa}^{ik})}^n \sum_{(n_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{(n_{ik}+s-j_{sa}^{ik})}^{n+l_{ik}} \sum_{(n_{ik}+s-j_{sa}^{ik})}^{(n_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{(n_{ik}+s-j_{sa}^{ik})}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_{ik}+j_{ik}-j_i-l_{k_1})}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \sum_{(n_{ik}+s-j_{sa}^{ik})}^{n_{ik}+l_{k_2}-j_{ik}} \sum_{(j_i+1)}^{(j_i+1)} \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_i-l_{k_1}-1)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_i-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_i-l_{k_2}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
 & \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s)}^{(l_i+n-D-s)} \right. \\
 & \left. \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \right)
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)!}{(n_s - j_i - n - 1 - j_i)!} \cdot \\
 & \frac{(j_s - n - 1)! \cdot (j_s - 2)!}{(j_s - n - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_s+n-D)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - k - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_{ik} - j_{sa}^{ik} + 1} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik} + 1)}^{(l_i - k + 1)} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
& \frac{(D - j_i - n + l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!} + \\
& \sum_{k=D+l_i}^{D-n+1} \sum_{j_{sa}^{ik}=n-l_i-j_s}^{(l_s-k+1)} \sum_{j_i=n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \left(\sum_{j_{ik}=j_i+j_{sa}^{ik}-1}^{(j_{ik}+j_{sa}^{ik})} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \right)$$

$$\sum_{n_{ik}=n_{is}-j_{ik}-k_1}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - j_s - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s < D - n \wedge l_s < D - n \wedge l_s < D - n \wedge l_s < D - n$$

$$2 \leq j_{sa}^i < j_{ik} - j_{sa}^{ik} + 1 \wedge j_{sa}^i < j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge j_{ik} = j_i + j_{sa}^{ik} - s \wedge j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + j_{sa}^{ik} \leq j_i - n \wedge j_{ik} + j_{sa}^{ik} \leq j_i - n \wedge j_{ik} + j_{sa}^{ik} \leq j_i - n$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$$

$$l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge l_{ik} - j_{sa}^{ik} + j_{sa}^i > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + k \wedge s > 4 \wedge s = s + k$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{z \Rightarrow j_s} j_{ik} j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 &\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\
 &\sum_{n_i=n+1}^n \sum_{(n_i+j_s+1)}^{(n+j_s+1)} \\
 &\sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{ik}+j_{ik}-n_{is})} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_2)}^{(n_{ik}+j_{ik}-n_{is})} \\
 &\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{is} - j_s - \mathbb{k}_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 &\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1 - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - j_{i_s}^{i_k} + 1)!}{(n_{i_k} + l_{i_k} - j_{i_s}^{i_k} - 1)! \cdot (j_{i_k} - j_s - j_{i_s}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_i+j_{i_s}^{i_k}-s} \sum_{(j_i=l_{i_k}+n+s-D-j_{i_s}^{i_k})}^{(l_{i_k}+s-k-j_{i_s}^{i_k}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s - 1)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
& \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=0}^{l_s + s - n - l_i} (j_s = j_{ik} - j_{sa}^{ik} + 1) \\
& \sum_{j_{sa}^{ik} = s}^{l_s + s - k} (j_i = l_{ik} + n + s - D - j_{sa}^{ik}) \\
& \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{(\quad)} \\
& \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_s+l_s)} \sum_{j_{ik}=l_{ik}-n-D}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{i=0}^n \sum_{(n_{is}=n_{is}+k)}^{(n_{is}+1)}$$

$$\frac{\sum_{i=0}^{n_{is}+j_s-j_{ik}-k} \sum_{(n_{ik}+j_{ik}-j_i-k)}^{(n_{ik}+j_{ik}-j_i-k)} \dots}{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-k-k_1-1)!}{(j_{ik}-k-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{is}-n_s-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(n_i + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot
 \end{aligned}$$

GÜLDÜZYAZ

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-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_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\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_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(j_s - j_{ik})} \sum_{j_{sa}^{ik}=j_s+j_{sa}^{ik}-1}^{(j_s - j_{ik})} \sum_{j_{sa}^{ik}=j_s+j_{sa}^{ik}-1}^{(j_s - j_{ik})} \sum_{j_{sa}^{ik}=j_s+j_{sa}^{ik}-1}^{(j_s - j_{ik})} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜM YA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{(n_{is}=n_{is}+k)}^n \sum_{(n_{is}=n_{is}+k)}^{(n_{is}+1)}$$

$$\sum_{(n_{ik}+k_2-j_{ik})}^{n_{is}+j_s-j_{ik}} \sum_{(n_{ik}+j_{ik}-j_i-k_1)}^{(n_{ik}+j_{ik}-j_i-k_1)}$$

$$\frac{(n_{is}-1)! \cdot (n_{is}-j_s+1)!}{(n_{is}-2)! \cdot (n_{is}-j_s+1)!}$$

$$\frac{(n_{is}-k_1-1)!}{(j_{ik}-k_1-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}$$

$$\frac{(n_{is}-n_s-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

GÜLDENWA

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l_i - l_s > 0 \wedge$$

$$j_{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^{ik}\}$$

$$s > 4, l_s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + 1 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=s+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{l_i-1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(n)} \sum_{(j_s=1)}$$

$$\sum_{(j_i=j_s+1)}$$

$$(n_{ik} - k_1 + 1) \dots (j_i - k_2)$$

$$n_i = n + k_1 \dots n_s = n - j_i + 1$$

$$\frac{(n_i - 2)! \cdot (n_{ik} - k_1 - 1)!}{(n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_s - k_2 - 1)!}{(j_i - k_1 - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=s+1)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

GÜLDÜZMAYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - \dots)!} \cdot \frac{(D - l_i)}{(D + j_i - n - l_i)! \cdot \dots - j_i)!} \cdot \sum_{k=i}^n \sum_{\binom{()}{j_s=1}} \sum_{j_{ik}=j_{sa}^{ik}} \sum_{\binom{()}{j_i=s}} \sum_{n_i=n}^n \sum_{\binom{()}{n_{ik}=n_i-j_i-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$\begin{aligned} & ((D \geq n < n \wedge l_i \leq D - \dots + 1 \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + \dots \wedge \\ & j_{ik} = j_i + j_{sa}^{ik} - s \wedge \\ & j_{ik} + \dots j_{sa}^{ik} \leq j_i - n \wedge \\ & l_{ik} - j_{sa}^{ik} + \dots > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge \\ & \dots \leq D - \dots - n) \vee \\ & (D \geq n < n \wedge l_i \leq D + s - n \wedge \\ & 1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \\ & j_{ik} = j_i + j_{sa}^{ik} - s \wedge \end{aligned}$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n)) \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$S_{i \rightarrow j}^{k, j_i} = \left(\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_s+s-k)} \sum_{(j_i=S+1)}^{(l_s+s-k)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \right)$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l-1} \sum_{j_s=0}^{n-k+1} \frac{(l_{ik} - k - j_{sa}^{ik} + 1)!}{j_{ik} = j_{sa}^{ik} - s \quad (j_i = l_s + s - k + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

GÜLDÜMNA

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-i-l-j_{sa}^{ik})} \sum_{(j_s)}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_k-1)} \sum_{(n_s=n-j_i+l_k)}^{(n_{ik}+j_{ik}-j_i-l_k)}$$

$$\frac{(n_{ik}-l_k-1)!}{(j_{ik}-2)! \cdot (n_i-j_{ik}-l_k-1)!} \cdot$$

$$\frac{(n_{ik}-l_k-1)!}{(j_i-j_{ik}-l_k-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_k)!} \cdot$$

$$\frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot$$

$$\frac{(l_{ik}-j_{ik}-l_s-j_{sa}^{ik}+1)!}{(l_{ik}-j_{ik}-l_s+1)! \cdot (j_{ik}-j_{sa}^{ik})!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left(\sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=s+2)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_k-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_k-1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_k)}$$

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$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (j_{sa} - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^k - l_{ik} - s)!}{(j_{ik} + l_i - j_{sa} - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_{sa} - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_{sa}^{ik}+1}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik})!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{sa}^{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{i-l_{ik}+k+1} \sum_{(j_s=2)}^{i-l_{ik}+k+1} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_{ik}+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_{ik}-j_s-j_{sa}^{ik}+1)}$$

$$\sum_{n_i=n+l_k}^{(n+l_k-1)} \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n+l_k-j_{ik}+1)} \sum_{n_s=n-j_i+1}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{ik} - l_{k1} - 1)!}{(n_i - 2)! \cdot (n_{ik} - j_{ik} - l_{k1} + 1)!}$$

$$\frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(j_{ik}-j_s-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i+s-k)} \sum_{j_i=s+1}^{(j_i+s-k)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - \dots)!}{(l_s - j_s - \dots - 1)! \cdot (\dots - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i - \dots)!}$$

$$\sum_{k=1}^{(j_s)} l_i^{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - \dots + 1 \wedge$$

$$1 \leq \dots j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik})} \sum_{(j_s=2)}^{(j_s=2)}$$

$$\sum_{j_{ik} = j_{ik} + 1}^{l_s + i^{l-k}} (j_i = j_{ik} + s - 1)$$

$$\sum_{n_i = n + \mathbb{k}}^n \sum_{(n_i - j_s + 1)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n - j_{ik} + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(n_s = n - j_i + 1)}^{(n_s = n - j_i + 1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

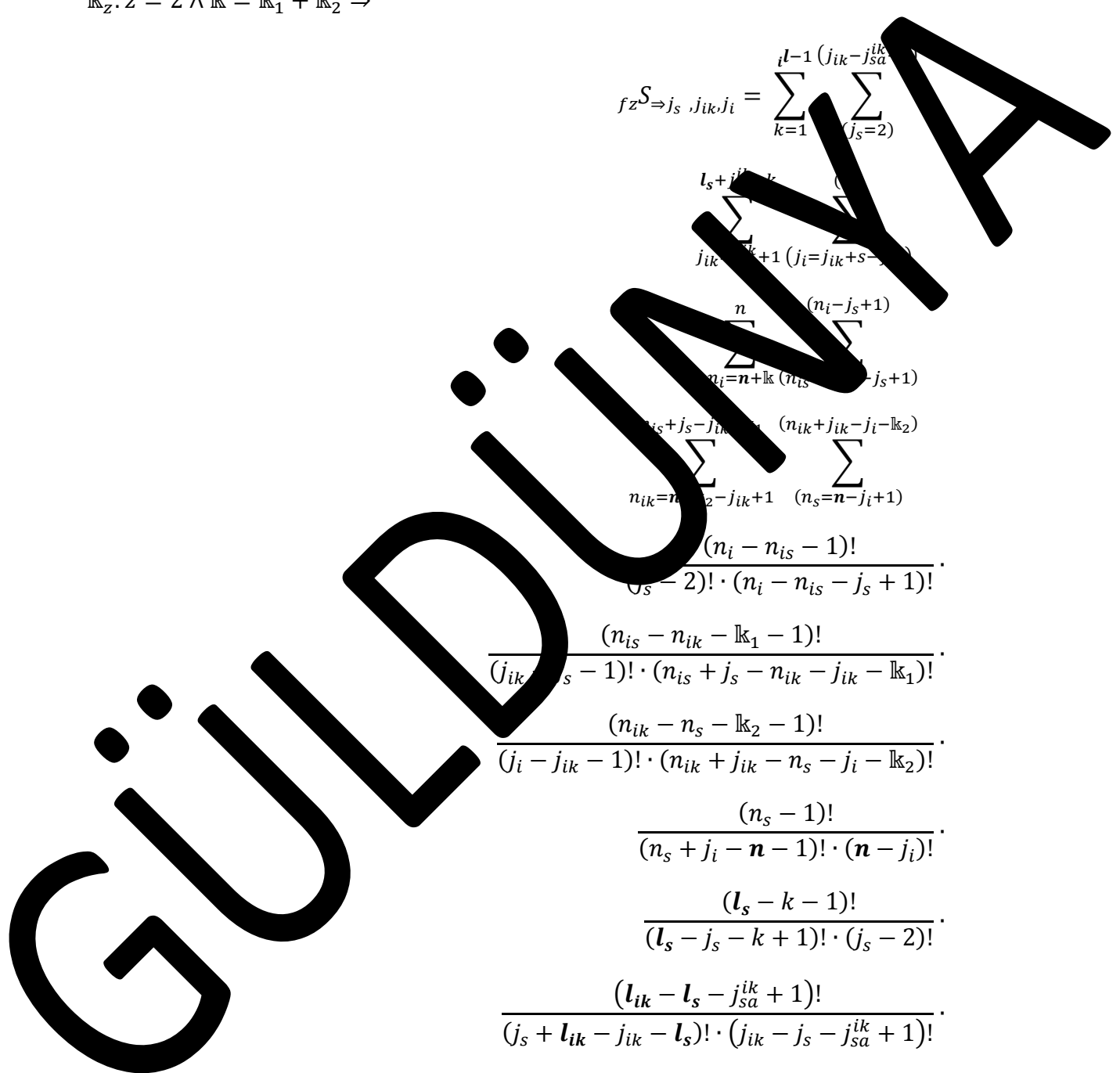
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$



$$\begin{aligned}
 & \sum_{j_{ik}=l_s+j_{sa}^{lk}-k+1}^{l_i+j_{sa}^{lk}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\sum_{k=i}^{\quad} \sum_{(j_s=1)}^{(\quad)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{lk}}^{l_i+j_{sa}^{lk}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}+1)!} \cdot
 \end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{j_s=1}^{j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{sa}^{ik}=1}^{j_{ik}-k} (j_i = j_{ik} + s - j_{sa}^{ik})$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_s+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=l} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{\binom{(\cdot)}{n_i=n_i-j_{ik}-\mathbb{k}_1+1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - l_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^l - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s + j_{sa}^{ik} - k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+k}^n \sum_{(n_s=n-j_s+1)}^{(n-j_s+1)}$$

$$\sum_{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_{is}-j_{ik}-k_2)}^{(n_{is}-j_{ik}-k_2)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!}$$

$$\frac{(n_{ik}-k_1-1)!}{(n_{ik}-k_1-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!}$$

$$\frac{(n_{ik}-k_2-1)!}{(n_{ik}-k_2-1)! \cdot (n_{is}+j_s-j_{ik}-k_2)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s-k+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

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$$\begin{aligned}
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - n - \dots - k - 1)!}{(n_s - j_i - n - \dots - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - \dots - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - \dots - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{l=1}^{()} \\
 & \sum_{j_{ik} = j_{sa}^{ik}}^{l_{ik} - i^{l+1}} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_s = n - j_i + 1}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\left(\sum_{k=1}^{i-1} \sum_{s=2}^{k-j_{sa}^{ik}+1} \right)$$

$$\sum_{k=1}^{l_s + j_{sa}^{ik}} \sum_{s=2}^{(l_i - k + 1) - j_{ik} + 1} (j_{ik} + s - j_{sa}^{ik} + 1)$$

$$\sum_{n_i=1}^n (n_{is} = n + k - j_s + 1)$$

$$\sum_{k_2 = j_{ik} - k_1}^{n_{is} + j_{ik} - k_1} \sum_{n_s = n - j_i + 1}^{(n_{ik} + j_{ik} - j_i - k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik} - j_{sa}^{ik} + 1)}^{(l_i - k + 1)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_{is} - n_s - k_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_s - k_1 - 1)!}{(j_{ik} - j_{sa} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{()} \sum_{i^l (j_s=1)}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik}-l+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-l+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_i + j_i - n - 1)! \cdot (n - j_i)!}{(n_{ik} - l_s - j_{ik} - 1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}{(l_i + j_{sa}^{ik} - l_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} - \\
 & \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}
 \end{aligned}$$

GÜLDEN

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik}}^{()} \sum_{(j_i=s)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}^{ik}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}^{ik}-l_{k_2})}$$

$$\frac{(n_i + j_i - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)! \cdot (n + j_i - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{ik}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_s \wedge$$

$$l_i \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = l_s = 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^s - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, \dots, l_{k_2}, \dots, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s \geq s + l_k \wedge$$

$$l_{k_z}: z = 2, \dots, k = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_{sa}^{ik})}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}-1)!} \cdot \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=l}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{lk}}^{l_i+j_{sa}^{lk}-l-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}+1)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l-1} \sum_{j_s=0}^{n-k+1}$$

$$\sum_{j_{ik}=0}^{n_i} \sum_{j_{sa}^{ik}=0}^{j_{ik}-1} \binom{(\quad)}{j_{ik} + j_{sa}^{ik} - 1} \binom{(\quad)}{j_i = j_{ik} + s - j_{sa}^{ik}}$$

$$\sum_{n_i=n+\mathbb{k}}^{n_i} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{j_s=1}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\quad)} \sum_{j_i=s}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

GÜLDÜNYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i \leq D + s - n) \vee$$

$$(D \geq n < n \wedge l_i \leq D + s - n \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n) \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$l_i \leq D + s - n) \wedge$$

$$D \geq n < n \wedge s = \mathbb{k} > 4 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \right)$$

$$\sum_{j_{ik}=j_s + j_{sa}^{ik} - 1}^{l_{ik} - k + 1} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})} \binom{(\quad)}{\quad}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n - j_s + 1)}^{(n_i - j_s + 1)} \binom{(\quad)}{\quad}$$

$$\sum_{n_{ik}=n+k_2 - j_{ik}}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s=n - j_i + 1)}^{(n_{ik} - k_1 - j_{ik} - k_2)}$$

$$\frac{(n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - j_s + 1)!}$$

$$\frac{(n_{ik} - k_1 - j_{ik} - k_2 - 1)!}{(n_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^i \sum_{(j_s=1)}^{\binom{(\quad)}{\quad}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{l_{ik} - i^{l+1}} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{\binom{(\quad)}{\quad}}$$

GÜLDÜZ

$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} - 1)!}{(l_{ik} - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \left(\frac{(D - l_{ik} - j_{sa} - 1)!}{(D - n_i - n_s - j_i - 1)! \cdot (n_i - j_i)!} \right) + \\
& \left(\sum_{k=1}^{i-l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \right) \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=2}^{l_s-k+1}$$

$$\sum_{j_{ik}=l_{ik}-k}^{l_{ik}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{l_i+1}$$

$$\sum_{n+l_k}^n \sum_{n_{ik}=l_{ik}-k_1+1}^{l_{ik}-k_1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i-1} \sum_{j_s=2}^{l_s-k+1}$$

GÜLDÜZMAYA

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_i - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_{sa}^{ik}+1}^{j_{sa}^i} \sum_{j_{sa}^s}^{(l_s+s-k)} \sum_{j_{ik}=j_i+j_{sa}^s}^{(n-D)} \sum_{n_i=n+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{is}=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_s+s-k+1) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{ik}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_s-n-j_i+1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-k+1)} (j_i=l_i+n-D) \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENREYER

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{l(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_i-l+1)} \sum_{(j_i=l_i+\mathbf{n}-D)}^{()} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{(j_s=j_i+j_{sa}^s, \dots)}$$

$$\sum_{(n_i-j_s+1, \dots)}$$

$$\sum_{(n_{ik}=n_{is}, \dots)}$$

$$\frac{(n_i + j_s - j_{ik} - k_1 - k_2 - j_{sa}^s)!}{(n_i - j_{ik} - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^s - s \wedge$$

$$j_{ik} - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$l_i < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik} \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$f_{zS}^{j_{ik}, j_i} = \sum_{k=1}^{(l_{ik} + s - n - l_i - j_{sa}^{ik} + 1)} \sum_{j=2}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{k=j_i + j_{sa}^{ik} - s}^{(l_s + s - k)} \sum_{(j_i = l_i + n - D)} \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-s}^{(l_{ik}+s-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{(n_{ik}+k-j_s+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+k_1-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

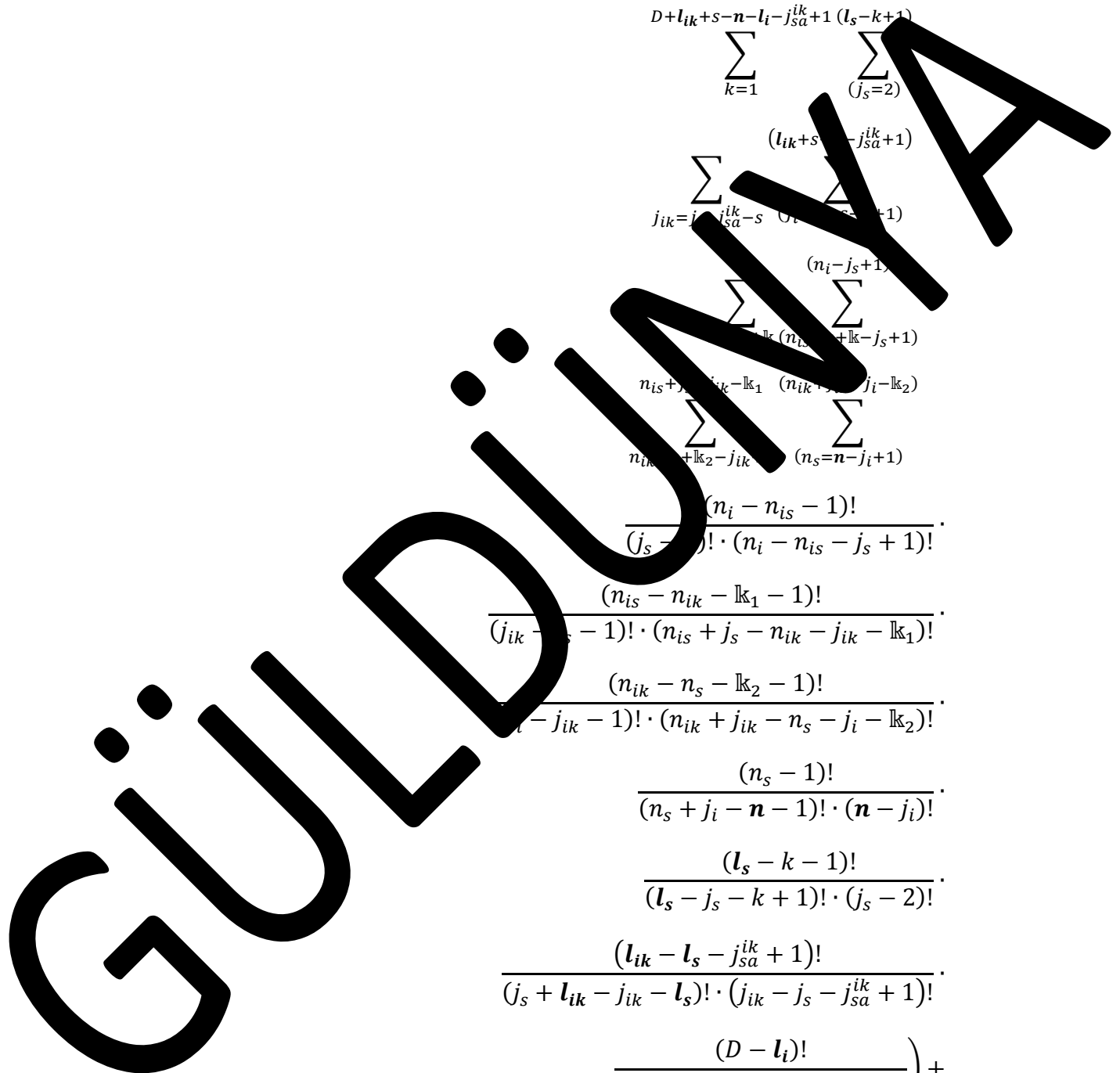
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right)$$



$$\begin{aligned}
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{j_i+j_{sa}^{ik}-s-1} \sum_{(j_i=l_s+s-k+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} (n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+s-k-j_{sa}^{ik}+2)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

GÜLDENKYA

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!}$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D}^{l-1} \sum_{j_s=2}^{l_s-k+1} \binom{l-1}{k} \binom{l_s-k+1}{j_s}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

GÜLDÜZÜM

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=i}^{(j_s)} \frac{(l_i - l_{i+1})!}{(j_{ik} + n - D - j_i + n - D)!} \cdot \\
 & \sum_{n+l_k}^n \sum_{(n_{ik}=j_{ik}-k_2-j_{ik}+1)}^{j_{ik}-k_1+1} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s)}
 \end{aligned}$$

GÜLDENMYA

$$\sum_{j_{ik}=j_i+j_{sa}^{ik}-s} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+l_1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+l_i-j_i-l_{k_2})}^{(\cdot)} \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-l_{k_1}-l_{k_2}-j_{sa}^s)!} \cdot \frac{(l_s+k-1)!}{(j_i-k+1)! \cdot (j_s-2)!} \cdot \frac{(D+l_s+n-l_i)! \cdot (n-j_i)!}{(D+l_s+n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_{k_1} \leq D + l_i + s - n - 1 \wedge$$

$$D > n < n \wedge l = l_{k_1} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^s - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_i, j_{sa}^i\} \wedge$$

$$s < 4 \wedge l_{k_1} = s + l_{k_2} \wedge$$

$$l_{k_2}: z = 2, \dots, l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)}$$

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_i)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
 & \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \frac{(n_i-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_i-n_{ik}-j_{ik}-k_1)!} \\
 & \frac{(n_{ik}-k_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_{ik}-l_{ik}-j_{sa}^{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_s - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{i=0}^{l_s - k + 1} \sum_{j_s=2}^{D + l_s + s - n - l_i + 1} \\
 & \sum_{j_{ik}=l_i + n + j_{sa}^{ik} - k - s + 1}^{i!} \sum_{(j_i=j_{ik} + s - j_{sa}^{ik})}^{(n - j_s + 1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s=n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZ

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{l_i + j_{sa}^{ik} - s + 1} \sum_{(j_s=1)}^{(j_s=j_{ik} - j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^{n+l_k-1} \sum_{n_i=n+l_k-1}^{n+l_k-1} \sum_{n_s=n-j_i+1}^{n_s=n-j_i+1} \\
 & \frac{(n_i - n_{ik} - k_1 - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(j_s=j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENYA

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-l_i)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik}$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge \mathbb{k} = \mathbb{k} > \mathbb{k} \wedge$$

$$j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathcal{S} \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(n-j_s+1)} \sum_{n_i=n+k}^n \sum_{(n_{is}=n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+j_s-j_{ik}-k_1}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_s=n-j_i+1)}^{(n_s=n-j_i+1)} \frac{(n_{is}-1)!}{(j_s-1)! \cdot (n_i-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(n_{is}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-k_1)!} \cdot \frac{(n_{ik}-k_2-1)!}{(n_{ik}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_s-k+1)} \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(j_{sa}^{ik})} \right)$$

GÜLDENYA

$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
& \frac{(n_s - j_i - n - l_i - k - 1)!}{(n_s - j_i - n - l_i - k - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) + \\
& \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \right. \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_i+n+j_{sa}^{ik}-D-s-1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
& \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \right)
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_{ik} - l_i - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_i-j_s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDENWA

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot$$

$$\sum_{k=0}^{D+l_{ik}+s-n-l_i-j_{ik}+1} \sum_{j_s=2}^{(n-k+1)} \frac{(n-k+1)!}{(j_s - 2)! \cdot (n - j_s + 1)!} \cdot$$

$$\sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \frac{(n_i - j_s + 1)!}{(j_s - j_{ik} - k_1)! \cdot (n_{ik} + j_{ik} - j_i - k_2)!} \cdot$$

$$\sum_{n_{ik}=n+k_2-j_{ik}+1} \sum_{(n_s=n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

GÜLDÜMNA

$$\begin{aligned}
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_i=l_{ik}+n-l_i-j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{(j_i=-D)}^{(l_s-k+1)} \\
& \sum_{(n_i-n_{is}+1)}^{(n_i-j_s+1)} \sum_{(n_{ik}+l_{k_1}-j_{ik}+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \\
& \sum_{(n_s=n-j_i+1)}^{(n_{ik}+l_{k_2}-j_{ik}+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \\
& \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{k=1}^n \sum_{j_s=1}^{(n-k)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i+1} \sum_{j_i=l_i+n}^{(l_i-i+1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{ik}=n+k_2-j_{ik}+1)}^{(n_i-j_{ik}-k_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-k_1} \\
 & \frac{(n_i - n_{ik} - k_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
 & \frac{(n_s - n_s - k_2 + 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - n_i - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_i - l_s + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(j_{sa}^{ik} - l_{ik} - s)!}{(j_i + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \left. \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) - \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(n-k)} \\
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(n-k)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_i+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDÜSÜYA

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$

$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$

$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$

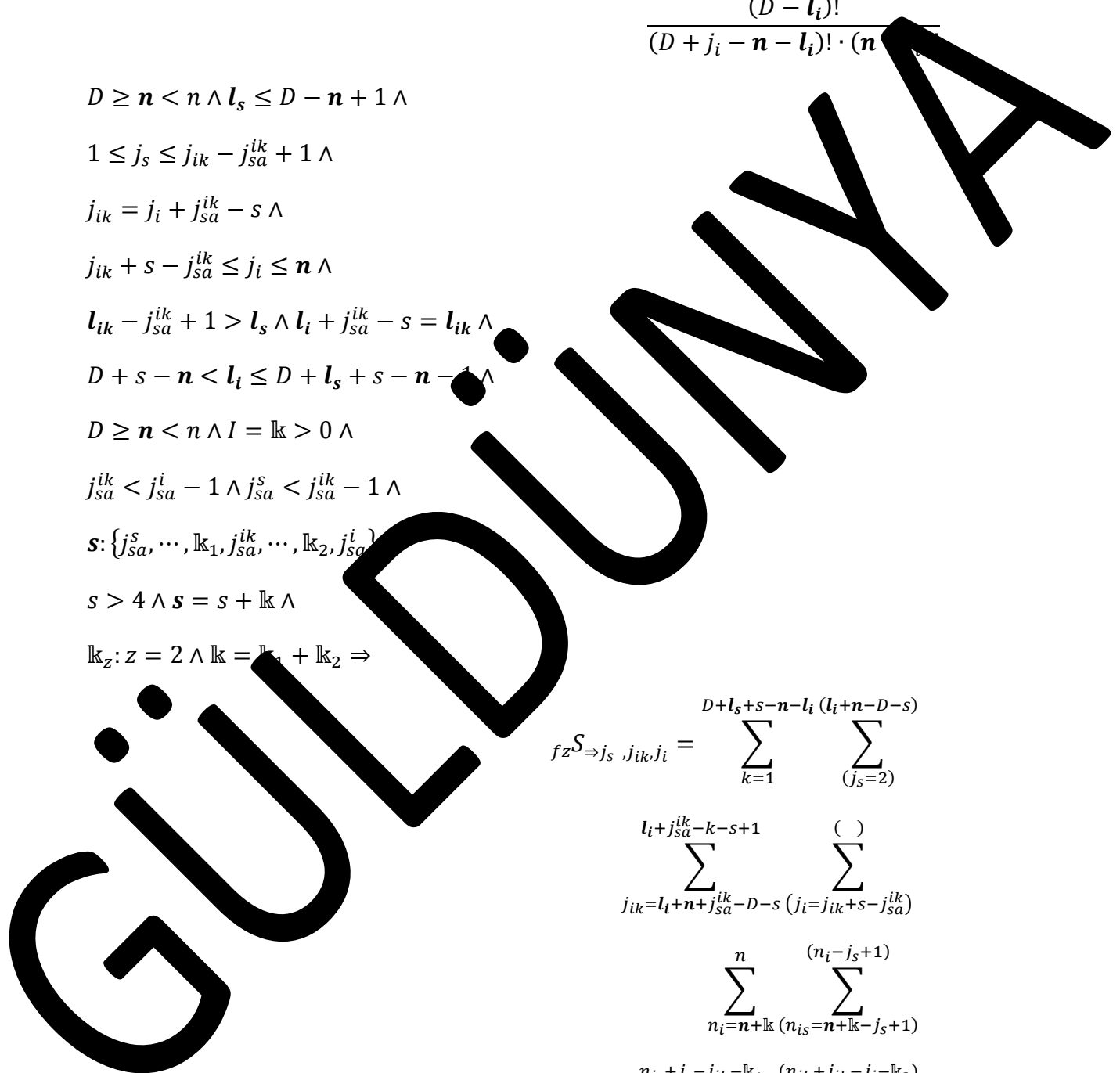
$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$



$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Delta} (n - l_i - k - 1)! \\
 & \sum_{k=j_s+j_{sa}^{ik}-1}^{l_i} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \binom{j_{ik}}{j_{sa}^{ik}}$$

$$\sum_{n_{is}+j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\sum_{n_{ik}+k_2-j_{ik}} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-i-l-s+1} \binom{(\quad)}{\quad} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{ik}=n+l_k-j_{ik}+1}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - 1)!}{(n_i + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{k_1} - l_{k_2} - j_{ik} - 1)!}{(l_{k_1} - j_{ik} - l_{k_2} + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_i-s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \binom{(\quad)}{\quad} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{n_{is}=n+l_k-j_s+1}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \binom{(\quad)}{\quad} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜM

$$((D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s > l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \vee$$

$$(D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_i - s + 1 > l_s \wedge$$

$$D + s - n < l_i \leq D + l_{ik} + s - n - j_{sa}^{ik}) \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k}$$

$$\mathbb{k} = z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \left(\sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \right.$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{sa} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_{ik} - j_{sa} + 1)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_{ik}+s-j_{sa}-j_{sa}^{ik}+1}^{l_{ik}-k+1} \sum_{j_s=l_i+n-D-s+1}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \left(\sum_{k=2}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{k=2}^{n-D-s} \right) \\
& \sum_{l_i+n-D}^{j_i+j_{sa}^{ik}-1} \sum_{l_i+n-D}^{(l_{ik}+s-k+1)} \\
& \sum_{n_i}^n \sum_{k}^{(n_i+n-k-j_s+1)} \\
& \sum_{n_{is}=j_{ik}-k_1}^{n_{is}=j_{ik}-k_1} \sum_{n_{ik}=k_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \sum_{n_{ik}=k_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j_i-k_2)} \sum_{(n_s=n-j_i+1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!}
\end{aligned}$$

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{(l_i+n-D-s)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_{ik}+j_{ik}-j_{sa}^{ik}+2)}^{(l_i-k+1)} \\
 & \sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{n_{ik}+k_2-j_{ik}}^{n_{is}+j_s-j_{ik}-1} \sum_{(j_i=j_{ik}+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_{is}-n-l_k-1)!}{(j_s-2)! \cdot (n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}-n-l_{k_1}-1)!}{(j_{ik}-j_{ik}-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-n_s-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{ik}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{ik}-j_{ik}-s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_{ik}+s-n-l_i-j_{sa}^{ik}+1} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)}
 \end{aligned}$$

GÜLDÜZMAYA

$$\begin{aligned}
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{lk}+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})} \\
 & \frac{(n_i-1)}{(j_s-2) \cdot (n_i-n_{is}+1)!} \cdot \\
 & \frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1) \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!} \cdot \\
 & \frac{(n_{ik}-j_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!} \cdot \\
 & \frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n-1)!} \cdot \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
 & \frac{(l_{ik}-l_s-j_{sa}^{lk}+1)!}{(j_{ik}-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{lk}+1)!} \cdot \\
 & \frac{(l_i+j_{sa}^{lk}-l_{ik}-s)!}{(j_{ik}+l_i-j_i-l_{ik})! \cdot (j_i+j_{sa}^{lk}-j_{ik}-s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{k=D+l_{ik}+s-n-l_i-j_{sa}^{lk}+2}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - j_s - 1)!}{(j_s - j_{ik} - 1)! \cdot (j_s - j_{ik} + 1)!} \cdot (j_s - 2)! \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(l_i + j_{ik} - l_{ik} - s)!}{(j_{ik} - j_i - l_{ik} - s)! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=i}^{\binom{D}{l}} \sum_{(j_s=1)}^{\binom{D}{l}} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=l_i+\mathbf{n}-D)}^{(l_i-i^{l+1})} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\begin{aligned}
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(l_i + j_{sa}^{ik} - l_{ik} - s)!}{(j_{ik} + l_i - j_i - l_{ik})! \cdot (j_i + j_{sa}^{ik} - j_{ik} - s)!} \cdot \\
& \left(\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \right) \cdot \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_i+n-D-s+k}^{(n-k)} \\
& \sum_{n_i=n+k}^n \sum_{(n_s=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-k_2)}^{()} \\
& \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D + s - n < l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz_{S \Rightarrow j_s, j_{ik}, j_i} = \frac{\sum_{l_s=2}^{D+l_s+s-n-l_{ik}-j_{sa}^{ik}+1} \sum_{j_i=2}^{l_s+s} \sum_{j_{sa}^{ik}=2}^{n+l_s+s-D-j_{sa}^{ik}} \sum_{n_{is}=2}^{n+l_s+k} \sum_{n_{ik}=2}^{n+l_s+k-j_s+1} \sum_{n_{ik}=2}^{n_{is}-j_{ik}-k_1} \sum_{n_{ik}=2}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜNYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_s+s-k+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+l_{k_2})}^{n_{is}+j_s-j_{ik}-1} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} + j_s - n_{ik} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{ik} - l_{k_2} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_2})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}
 \end{aligned}$$

GÜLDENYA

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - l_{k_1})!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - 1)!}{(n_s - j_i - n - l_i - 1)!} \cdot \\
 & \frac{(j_s - n - l_i - k - 1)!}{(j_s - n - l_i - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{()} \sum_{i=l}^{()} \\
 & \sum_{j_{ik}=j_i+j_{sa}^{ik}-s}^{(l_{ik}+s-i-l-j_{sa}^{ik}+1)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \\
 & \frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot
 \end{aligned}$$

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$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \binom{D+l_s+s-n-l_i}{j_s=j_{ik}+j_{sa}^{ik}+1} \sum_{l_s+1}^{l_s+l_i} \binom{l_s+l_i}{j_i=j_{ik}-s+j_{sa}^{ik}} \sum_{n_i+l_k}^{n_i+l_k} \binom{l_s+l_i}{n_i+l_k} \sum_{n_i+l_k}^{n_i+l_k} \binom{l_s+l_i}{n_i+l_k} \sum_{n_i+l_k}^{n_i+l_k} \binom{l_s+l_i}{n_i+l_k} \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i + n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\begin{aligned} & D \geq n < n \wedge l_s \leq D - n + 1 \wedge \\ & 1 \leq j_i \leq j_{ik} - j_{sa}^{ik} + 1 \wedge \\ & j_{ik} = j_i + j_{sa}^{ik} - s \wedge \\ & j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge \\ & l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge \\ & D + s - n < l_i \leq D + l_s + s - n - 1 \wedge \\ & D \geq n < n \wedge l = k > 0 \wedge \\ & j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge \end{aligned}$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(j_s-1)} \dots$$

$$\sum_{j_{ik}=l_{ik}+n}^{l_s+j_{sa}^{ik}-k} \dots$$

$$\sum_{(n_i-j_s+1)}^{(n_i-j_s)} \dots$$

$$\sum_{(n+k)}^{(n+k-j_s+1)} \dots$$

$$\sum_{(n_{is}-j_{ik}-k_1)}^{(n_{is}-j_{ik}-k_2)} \dots$$

$$\sum_{(n+k_2-j_{ik}+1)}^{(n_s-n-j_i+1)} \dots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot$$

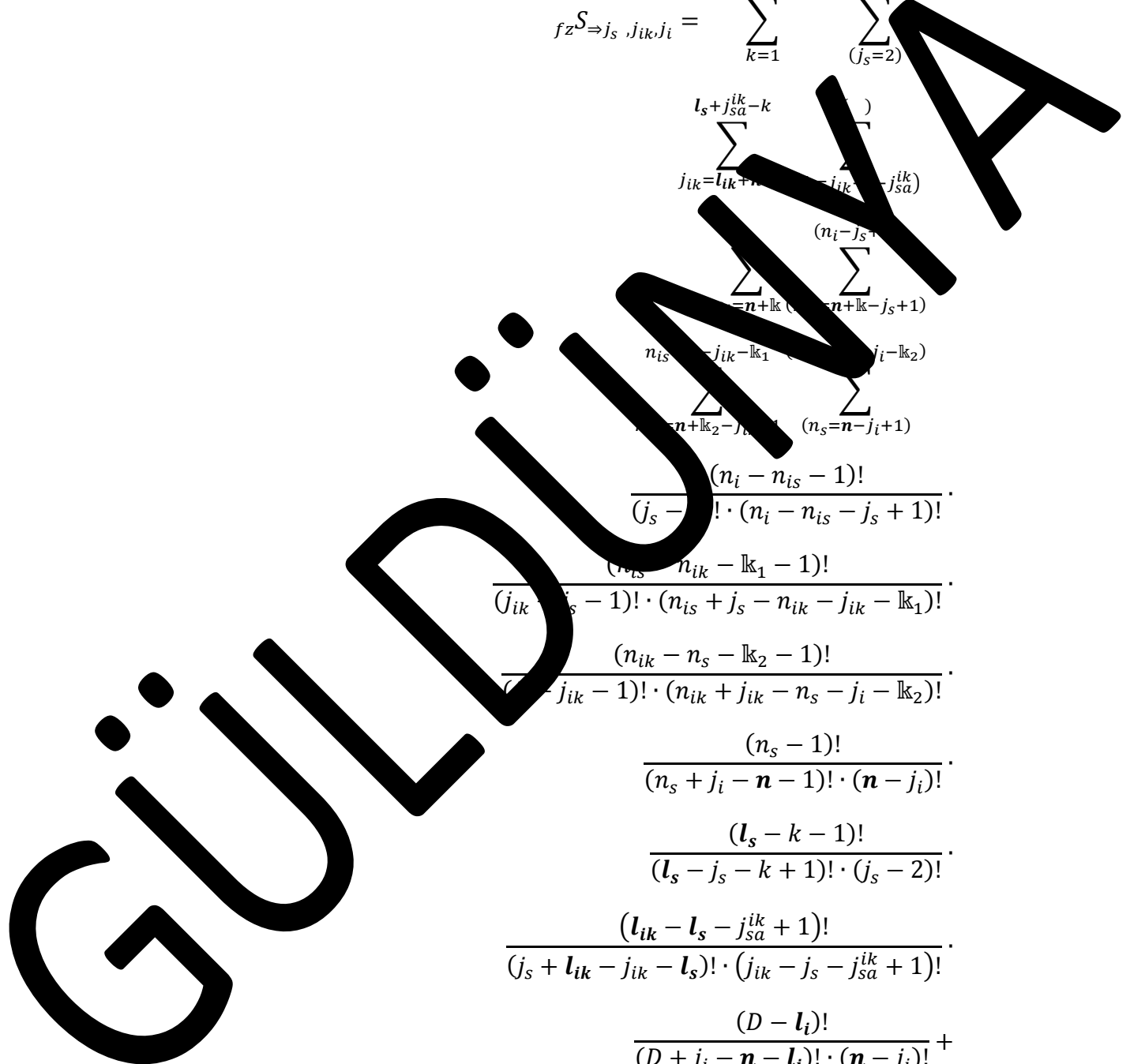
$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i(l_s-k+1)} \sum_{(j_s=2)}^{(j_s-1)}$$



$$\begin{aligned}
 & \sum_{j_{ik} = l_s + j_{sa}^{ik} - k + 1}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_1)} \\
 & \frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - j_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - j_i - n - 1)! \cdot (n - j_i)!}{(n_s - 1)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_{ik} - j_s - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k = D + l_s + s - n - l_i + 1}^{i^{l-1}} \sum_{(j_s = 2)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = l_{ik} + n - D}^{l_{ik} - k + 1} \sum_{(j_i = j_{ik} + s - j_{sa}^{ik})}^{()} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_{ik} - k + 1)! \cdot (j_{ik} - j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{(\cdot)} \sum_{l=(j_s=1)}^{(\cdot)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\cdot)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot
 \end{aligned}$$

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$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+s-j_{sa}^i)}^{()}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n-\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()}$$

$$\frac{(n_i + \dots + \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i - \dots - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - \dots + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D - j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s \leq D - n \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = \dots + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq \dots \leq n \wedge$

$l_{ik} = \dots + 1 > l_s \wedge \dots + j_{sa}^{ik} - \dots = l_{ik} \wedge$

$\dots + s - \dots < l_i \leq D + \dots + s - n - 1 \wedge$

$D \geq n < n \wedge l_s \leq D - n \wedge$

$j_{sa}^{ik} < j_{sa}^i \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$

$\dots \{j_{sa}^s, \dots, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$

$s > 4 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 f_{z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+k_2-j_{sa}^{ik}-1}^{n_{is}+j_s-j_{ik}-1} \sum_{(n_s=n-j_i+1)}^{(n_{is}+j_{ik}-j_{sa}^{ik}-k_2)} \\
 &\quad \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\quad \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{(\quad)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
\end{aligned}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{l_{ik} - l_s + 1} \sum_{j_s=1}^{(n - j_i - k)} \\
 & \sum_{n_i=n+\mathbb{k}}^{n_i=n+\mathbb{k}-\mathbb{k}_1+1} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{n_s=n-j_i+1}^{(n - j_i - k)} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{j_s=l_{ik}+n-D-j_{sa}^{ik}+1}^{(l_s-k+1)}
 \end{aligned}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_i=j_{ik}+s-j_{sa}^{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_i=n+l_k-j_s)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_s-j_i-l_{k_2})}^{()}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - j_s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D + l_s - n - l_i)! \cdot (n - j_i)!}{(D + l_s - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$

$l_{ik} - j_{sa}^{ik} + 1 > l_s - l_i + j_{sa}^{ik} - s = l_i \wedge$

$D > n < n \wedge l_s = l_k > 0$

$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1$

$s: \{j_{sa}^s, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$

$s > 4 \wedge s = l_s - l_k \wedge$

$l_{k_2} = l_s - l_k = l_{k_1} + l_{k_2} \Rightarrow$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - j_{i_k} - j_{s_a}^{i_k} + 1)!}{(n_{i_k} + l_{i_k} - j_{i_k} - j_{s_a}^{i_k})! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_i+l_{i_k}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(l_i - l_j)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{j_{ik}=D+l_s+s}^{D-n+1} \sum_{j_s=l_s+n-D}^{l_i+1} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_i-k+1)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

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$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \binom{()}{(j_s=j_{ik}-j_{sa}^{ik}+1, \dots)}$$

$$\sum_{j_s=j_i+l_{ik}}^{j_s=j_i+l_{ik}+s-k} \binom{()}{(j_s=j_i+l_{ik}, \dots)}$$

$$\sum_{n+l_{ik}}^{n+l_{ik}+j_s+1} \binom{()}{(n_i-j_s+1, \dots)}$$

$$\sum_{n_{ik}=n_{is}-j_{ik}-l_{k_1}}^{n_{ik}=n_{is}-j_{ik}-l_{k_1}+n_{ik}+j_{ik}-j_i-l_{k_2}} \binom{()}{(n_i-j_s+1, \dots)}$$

$$\frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{sa}^s)!}{(n_i - j_i - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s < D - n - 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_s - s \wedge$$

$$j_{ik} + j_{sa}^{ik} \leq j_i - l_{k_1} \wedge$$

$$l_{ik} - j_{sa}^{ik} + j_s > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$n - j_i - l_{k_1} - l_{k_2} \wedge I = l_{k_1} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, l_{k_1}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + l_{k_1} \wedge$$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S \Rightarrow j_s} j_{ik} j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_i}^n \sum_{(n_i+j_s+1)}^{(n_i+j_s+1)}$$

$$\sum_{(n_i+j_s-j_{ik}-\mathbb{k}_1)}^{n_i+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j_{ik})}^{(n_{ik}+j_{ik}-j_{ik})}$$

$$\frac{(n_i - n_{is})}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - j_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{is} - j_s - \mathbb{k}_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

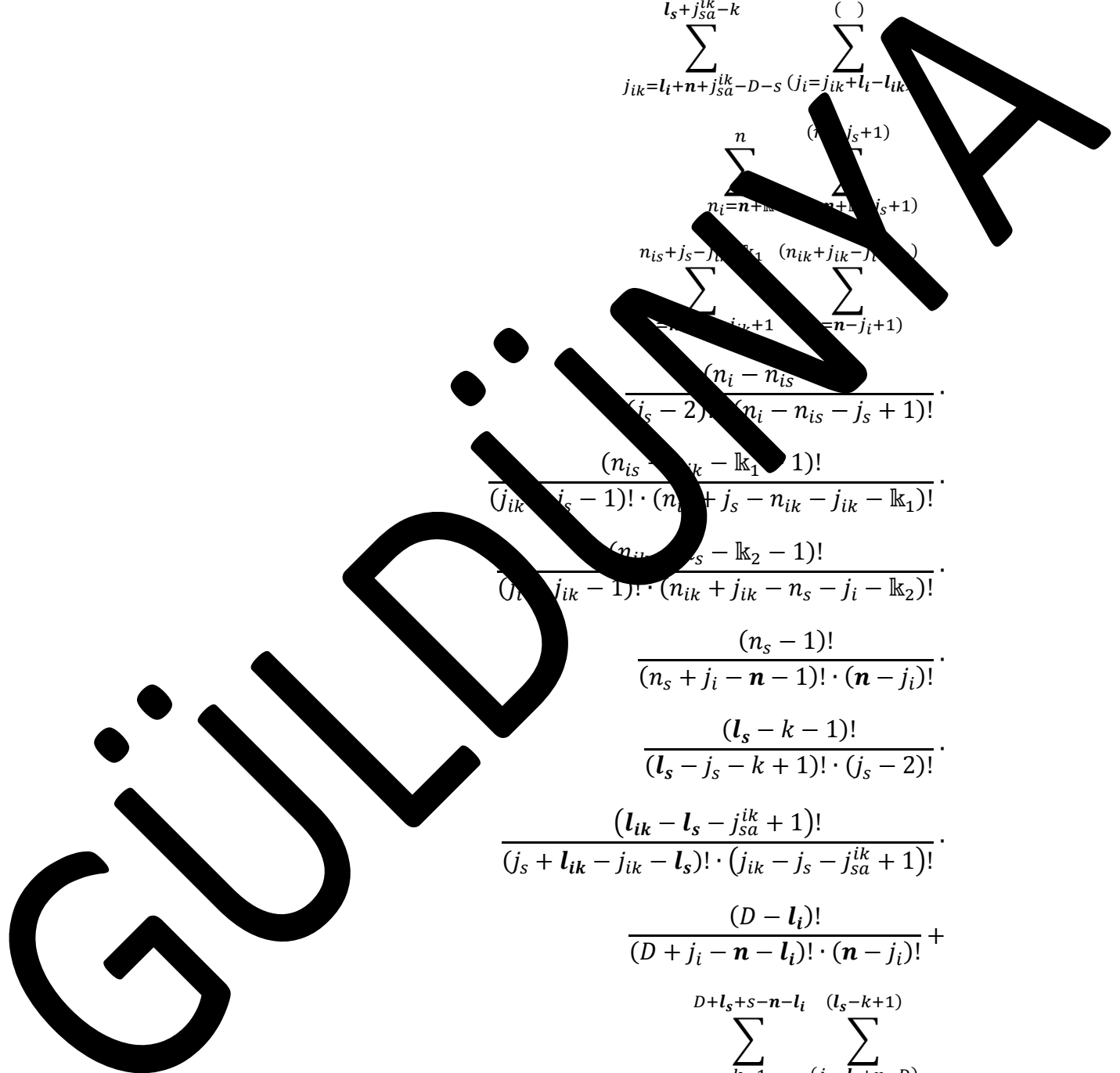
$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$



$$\begin{aligned}
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - j_i - n - k - 1)!}{(n_s - j_i - n - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - j_{sa}^{ik} + 1)!}{(j_{ik} + l_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k = D + l_s + s - n - l_i + 1}^{D - n + 1} \sum_{(j_s = l_s + n - D)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - k - s + 1}^{l_i + j_{sa}^{ik} - k - s + 1} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{(\quad)} \\
 & \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n + k_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - l_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \frac{(D - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=0}^{l_s + s - n - l_i} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)} \sum_{l_s + n + j_{sa}^{ik} - D - s}^{j_{sa}^{ik} - k} \sum_{(j_i = j_{ik} + l_i - l_{ik})}^{()} \sum_{n_i = n + \mathbb{k}}^n \sum_{(n_{is} = n + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}^{()} \cdot \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$D \geq n < n \wedge l_s > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$

$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge I = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz^{S \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=0}^{l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_i=n-s)} \sum_{(j_{sa}^{ik}=l_i+l_{ik})}^{(j_{sa}^i=l_i+l_{ik})} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(j_i=j_{ik}+l_i-l_{ik})} \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

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$$\begin{aligned}
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
& \sum_{(n_{ik}+l_{k_2}-j_{ik})}^n \sum_{(n_{ik}+j_{ik}-j_i-l_{k_2})}^{(n_{ik}+1)} \\
& \sum_{(n_{ik}+l_{k_2}-j_{ik})}^{(n_{ik}+1)} \sum_{(j_i=j_i+1)}^{(n_{ik}+1)} \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \frac{(n_{ik} + j_{ik} - j_i - l_{k_2})!}{(n_{ik} - n_s - l_{k_2} - 1)!} \\
& \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \frac{(n_{ik} + j_{ik} - j_i - l_{k_2})!}{(n_{ik} - n_s - l_{k_2} - 1)!} \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}
\end{aligned}$$

$$\begin{aligned}
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n+l_{k_2}-j_{i_k}+1}^{n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{i_k}+j_{i_k}-j_i-l_{k_2})} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - n_{i_k} - l_{k_1} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - j_{i_k} - l_{k_1})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_{k_2} - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_{k_2})!} \cdot \\
 & \frac{(n_s - j_i - n - l_i - j_i)!}{(n_s - j_i - n - l_i - j_i)!} \cdot \\
 & \frac{(n - j_s - n - l_i - k - 1)!}{(n - j_s - n - l_i - k - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{i_k} - j_{i_k} - j_{s_a}^{i_k} + 1)!}{(n_{i_k} + l_{i_k} - j_{i_k} - j_{s_a}^{i_k})! \cdot (j_{i_k} - j_s - j_{s_a}^{i_k} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_i+n-D-s+1)}^{(l_s-k+1)} \\
 & \sum_{j_{i_k}=j_s+j_{s_a}^{i_k}-1} \sum_{(j_i=j_{i_k}+l_i-l_{i_k})}^{(\quad)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{i_s}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{i_k}=n_{i_s}+j_s-j_{i_k}-l_{k_1}} \sum_{(n_s=n_{i_k}+j_{i_k}-j_i-l_{k_2})}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - l_{k_1} - l_{k_2} - j_{s_a}^s)!}{(n_i - n - l_{k_1} - l_{k_2})! \cdot (n + j_s - j_i - j_{s_a}^s)!} \cdot
 \end{aligned}$$

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$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} S \Rightarrow j_s, j_{ik}, j_i &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)} \\ &\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ &\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ &\sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\ &\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(D + j_s - n - l_i)! \cdot (j_i)!} + \\
& \sum_{k=0}^{D+l_s+n-l_i} \sum_{l=0}^{l_s-k+1} \sum_{j_i=n-D}^{l_s+n-D} \frac{(l_{ik}+s-k-j_{sa}^{ik}+1)!}{(j_i+l_{ik}-l_i)! \cdot (j_i=l_s+s-k+1)!} \cdot \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-k-j_{sa}^{ik}+1)}$$

$$\sum_{n+l_k}^n \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)}$$

$$\sum_{n_{ik}+l_{k_2}-j_{ik}}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_{is} - n_{is} - 1)!}{(j_i - 2)! \cdot (n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{is} - l_{k_1} - 1)!}{(j_{ik} - j_i - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

$$\frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)}$$

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$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{i_s}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_1)}^{(\quad)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)! \cdot (l_s - 2)!}{(l_s - j_s - 1)! \cdot (l_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_s \leq j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + 1$$

$$\mathbb{k}_z: z = 1, 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{i_s}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_s - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
 \end{aligned}$$

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$$\begin{aligned}
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(n - l_i)!}{(D + j_{ik} - n - l_i)! \cdot (j_i)!} + \\
 & \sum_{j_i = l_{ik} + n - D}^{D - n + l_s + s - 1} \sum_{j_s = l_s + n - D}^{(l_s - k + 1)} \binom{n - j_s + 1}{j_s} \cdot \\
 & \sum_{n_i = n + \mathbb{k}_2 - j_{ik} + 1}^n \sum_{(n_{is} = n + \mathbb{k}_2 - j_s + 1)}^{(n_i - j_s + 1)} \binom{n_{is} + j_s - j_{ik} - \mathbb{k}_1}{n_{ik} = n + \mathbb{k}_2 - j_{ik} + 1} \binom{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}{(n_s = n - j_i + 1)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
 \end{aligned}$$

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$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()} \sum_{j_{ik}=l_{ik}+n-D}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{(n_i=n+1)}^{n} \sum_{(n_i=n+1)}^{n+k} \frac{(n_i - j_s - j_i - l_{ik} - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n_i + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s + j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D \geq n < n \wedge l_s > D - n + 1 \wedge$$

$$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1$$

$$j_{ik} = j_i + j_{sa}^{ik} - s$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n$$

$$l_{ik} - j_{sa}^{ik} + s = l_s \wedge l_i - j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D > n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s \in \{j_{sa}^i, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^s\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 f_{Z^S \Rightarrow j_s, j_{ik}, j_i} &= \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_s+n-D)}^{(l_{ik}+n-D-j_{sa}^{ik})} \\
 &\quad \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 &\quad \sum_{n_{ik}=n+k_2-j_s+1}^{n_{is}+j_s-j_{ik}} \sum_{(n_{is}+j_{ik}-n_{i-k_2})}^{(n_{is}+j_{ik}-n_{i-k_2})} \\
 &\quad \sum_{(n_s=n-j_i+1)}^{n_{ik}=n+k_2-j_s+1} \\
 &\quad \frac{(n_i - n_{i-k_2} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 &\quad \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\quad \frac{(n_{ik} - n_{i-k_2} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 &\quad \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 &\quad \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 &\quad \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 &\quad \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 &\quad \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_{ik}=n+l_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!} \cdot \\
& \frac{(n_{ik} - n_s - l_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - l_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + 1 - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=D+l_s+s-n-l_i+1}^{D-n+1} \sum_{(j_s=l_s+n-D)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+l_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - l_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_1)!}
\end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 1)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \sum_{j_s=1}^{D+l_s+s-n-l_i} \sum_{j_{ik}=j_s}^{(l_s-k+1)} \sum_{j_{sa}^{ik}=j_{ik}+1}^{(j_{ik}-j_s)} \sum_{j_i=j_s+j_{sa}^{ik}-1}^{(j_i=j_{ik}+l_i-l_{ik})} \sum_{n_i=n+\mathbb{k}}^n \sum_{n_s=n+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_s+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$n \geq n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$fz \stackrel{S \Rightarrow j_s, j_i}{=} \sum_{k=1}^{l-1} \binom{j_{sa}^{ik}+1}{j_s} \binom{l-s-k}{j_{ik}-j_s} \binom{n_i-j_s+1}{n_i=n+k} \binom{n_i+n+k}{n_i=n+k-j_s+1} \binom{n_{is}+j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+1} \binom{n_{ik}+j_{ik}-j_i-k_2}{n_s=n-j_i+1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)}^{(l_s - k + 1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - k + 1)} \sum_{(j_i=l_s+s-k+1)}^{(l_i - k + 1)} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n-k-j_s+1)}^{(n_i - j_s + 1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{(n_{is}+j_{ik}-i-k_2)} \\
 & \sum_{n_{ik}=n+k_2-1}^{(n_{is}+j_{ik}-i-k_2)} \sum_{(n_s=n-j_i)}^{(n_{is}+j_{ik}-i-k_2)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_{ik} - k_2 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i - i^{l+1})} \sum_{(j_i=s)}^{(l_i - i^{l+1})}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k1}+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-l_{k2}} \\
& \frac{(n_i - n_{ik} - l_{k1} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k1} + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - l_{k2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k2})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} - 1)!}{(l_{ik} - j_{ik} - l_{k1} + 1)! \cdot (j_{ik} - l_{k1})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=j_{ik}-j_{sa}^k+1)}^{(j_s=j_{ik}-j_{sa}^k+1)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=s+1)}^{(l_s+s-k)} \\
& \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k2})}^{(n_s=n_{ik}+j_{ik}-j_i-l_{k2})} \\
& \frac{(n_i + j_s - j_i - l_{k1} - l_{k2} - j_{sa}^s)!}{(n_i - n - l_{k1} - l_{k2})! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{l-1} \sum_{(j_s=1)}^{(j_s=1)}
\end{aligned}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j_i=s)}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\cdot)} \sum_{n_s=n_{ik}+j_{ik}-j_i}^{(\cdot)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(D - l_i)}{(D + s - l_i)! (n - s)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s \geq 4 \wedge s = s - \mathbb{k} \wedge$$

$$\mathbb{k}_2 = 2 \wedge \mathbb{k} = \mathbb{k}_1 = \mathbb{k}_2 \Rightarrow$$

$$f_{zS \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{i-1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\cdot)}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa}^{ik} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{k=1}^{i^{l-1} (l_s - k + 1)} \sum_{(j_s=2)} \\
& \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}
\end{aligned}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - k)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{l_i + j_{sa}^{ik} - s + 1} \sum_{j_s=1}^{(n - j_i - k)} \sum_{j_{ik}=j_{sa}^{ik}}^{(n_{ik} - n + \mathbb{k}_2 - j_{ik} + 1)} \sum_{j_i=j_{ik} + l_i - l_{ik}}^{(n_{ik} + j_{ik} - j_i - \mathbb{k}_2)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{i^{l-1}} \sum_{j_s=j_{ik} - j_{sa}^{ik} + 1}^{(n - j_i - k)}$$

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$$\begin{aligned}
 & \sum_{j_{ik}=j_{sa}^{ik}+1}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(l_s-k-1)!}{(j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(D-l_i)!}{(D+j_s-n-l_i)! \cdot (n-j_i)!} \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{()} \sum_{(j_i=s)}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n_i-j_{ik}-l_{k_1}+1)}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()} \\
 & \frac{(n_i+j_s-j_i-l_{k_1}-l_{k_2}-j_{sa}^s)!}{(n_i-n-l_{k_1}-l_{k_2})! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \\
 & \frac{(D-l_i)!}{(D+s-n-l_i)! \cdot (n-s)!}
 \end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 - j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$l_{ik} \leq D + j_{sa}^{ik} - n \wedge$$

$$D \geq n < n \wedge l = k > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, k_1, j_{sa}^{ik}, \dots, k_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + k \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \Rightarrow$$

$$\begin{aligned}
 & f_{z \Rightarrow i} \sum_{k=1}^{l-1} \sum_{j_i = j_{sa}^{ik} - k}^{j_i - l_{ik}} \binom{l-k+1}{j_i - l_{ik}} \\
 & \sum_{j_s = j_{sa}^{ik} - 1}^{l_i + j_{sa}^{ik} - k} \binom{l_i + j_{sa}^{ik} - k - j_s}{j_i - l_{ik}} \\
 & \sum_{n_i = n+k}^{n_i + j_{ik} - k_1} \sum_{n_{is} = n+k - j_s + 1}^{(n_i - j_s + 1)} \\
 & \sum_{n_{ik} = n+k_2 - j_{ik} + 1}^{n_{is} + j_{ik} - k_1} \sum_{(n_s = n - j_i + 1)}^{(n_{ik} + j_{ik} - j_i - k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=1}^{i^l} \sum_{(j_s=1)}^{(\quad)} \\
 & \sum_{j_{ik}=j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-i^{l-s+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{(n_{ik}+j_{ik}-j_i-l_{ik})} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - j_{ik} - \mathbb{k}_1 - 1)!} \cdot \\
 & \frac{(n_s - n_s - \mathbb{k}_2 - 1)!}{(i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_{ik} - j_i - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_i - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \\
 & \sum_{k=1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\quad)} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{(\quad)} \\
 & \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}
 \end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{(j_s)} \sum_{l_i=1}^{(j_s - k)} \sum_{n_i=n+l_k}^n \sum_{n_s=n+l_k+l_i}^{(j_s - k + 1) n_s = n + j_{ik} - j_i - l_{k_2}} \frac{(n_i - n - l_{k_2})! \cdot (n + j_s - j_i - j_{sa}^s)!}{(D + s - n - l_i)! \cdot (n - s)!}$$

- $D \geq n < n \wedge l_s \leq D - n + 1 \wedge$
- $1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$
- $j_{ik} = j_i + j_{sa}^{ik} -$
- $j_{ik} + s - j_{sa}^{ik} < j_i \leq n$
- $l_{ik} - j_{sa}^{ik} + 1 > l_i \wedge l_i + j_{sa}^{ik} - s = l_{k_2} \wedge$
- $D + s - n < l_i \leq D + s - n - 1 \wedge$
- $D \geq n < n - l = l_{k_2} > 0 \wedge$
- $j_{sa}^{ik} - l_{k_2} - 1 \wedge j_{sa}^{ik} < j_{sa}^{ik} - 1 \wedge$
- $s: \{j_{sa}^s, \dots, l_{k_2}, j_{sa}^{ik}, \dots, l_{k_2}, j_{sa}^i\} \wedge$
- $j_{sa}^{ik} = s + l_{k_2} \wedge$
- $l_{k_2}: z = 2 \wedge l_{k_2} = l_{k_1} + l_{k_2} \Rightarrow$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\begin{aligned}
& \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_1)} \\
& \frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!} \cdot \\
& \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-k_1)!} \cdot \\
& \frac{(n_{ik}-n_{ik}-k_2)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-k_2)!} \cdot \\
& \frac{(n_i-1)!}{(n_s-j_i-n-1)! \cdot (n-j_i)!} \cdot \\
& \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \cdot \\
& \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \cdot \\
& \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
& \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_s+s-k+1)}^{(l_i-k+1)} \\
& \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)}
\end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_{ik} - k + 1)! \cdot (l_s - j_{sa} - 2)!} \cdot \\
& \frac{(l_{jk} - l_s - j_{sa} + 1)!}{(j_s + l_{ik} - j_{sa} - 1)! \cdot (j_{ik} - j_{sa} - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=0}^{l_i} \sum_{j_s=2}^{(l_s-k+1)} \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_i-k+1)} \sum_{j_i=l_i+n-D}^{(l_i-k+1)} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot
\end{aligned}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{()} \sum_{(j_s=1)}$$

$$\sum_{(j_i=l_i+n-D)}$$

$$\sum_{n_i=n+l_{k_1}} \sum_{n_i=n+l_{k_2}+1} \sum_{n_s=n-j_i+1}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(n_i - 2)! \cdot (n_i - n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_i+n-D)}^{(l_s+s-k)}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{\binom{()}{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \frac{(n_i+j_s-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^s)!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)! \cdot (n+j_s-j_i-j_{sa}^s)!} \cdot \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-1)!} \cdot \frac{(D-l_i)}{(D+j_i-n-l_i)! \cdot (n-j_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik}$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = \dots + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \dots + \mathbb{k}_2 =$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=1}^{D+l_s+s-n-l_i(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{\binom{()}{j_i=j_{ik}+l_i-l_{ik}}}$$

$$\sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\begin{aligned}
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_{sa} + j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{sa} - l_s)! \cdot (j_s - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + l_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_s+j_{sa}^{ik}-k+1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+k}^n \sum_{(n_{is}=n+k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+k_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot
 \end{aligned}$$

GÜLDÜNKYA

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(D + j_s - n - l_i)! \cdot (n - j_i)!} + \\
& \sum_{i=D+l_s+1}^n \sum_{j_s=2}^{l_s-k+1} \sum_{j_{ik}=l_i}^{l_i+j_{sa}^{ik}-1} \sum_{j_{sa}^{ik}=j_{sa}^{ik}-D-s}^{j_{sa}^{ik}-1} \binom{n_i - j_s + 1}{n_{is}=n+\mathbb{k} - j_s + 1} \binom{n_{ik} + j_{ik} - j_i - \mathbb{k}_2}{n_s = n - j_i + 1} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
\end{aligned}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{l_i} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-l-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_k-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n+l_k-j_i-l_{k_2})}^{(n_{ik}+j_i-j_i-l_{k_2})}$$

$$\frac{(n_i - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - l_{k_1} - 1)! \cdot (n_{ik} - j_{ik} - l_{k_1} + 1)!}$$

$$\frac{(n_{ik} - l_{k_2} - 1)!}{(j_i - j_{ik} - l_{k_2} - 1)! \cdot (n_{ik} - j_{ik} - n_s - j_i - l_{k_2})!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - j_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} -$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{()}$$

$$\sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_s+j_{sa}^{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n_{ik}+j_{ik}-j_i-l_{k_2})}^{()}$$

GÜLDÜZÜMÜ

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - l_i)!}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\}$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS \Rightarrow j_s, j_{ik}, j_i = \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_i+n-D-s)} \sum_{j_{ik}=l_i+n+j_{sa}^{ik}-D-s}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\begin{aligned}
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_s - 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - 1)!} \cdot \\
 & \frac{(n - l_i)!}{(n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{\Delta} \sum_{j_s=l_i+n-D-s+1}^{\Delta} (j_s - n - l_i - 1)! \\
 & \sum_{i_k=j_s+j_{sa}^{ik}-1}^{l_i+j_{sa}^{ik}-k-s+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot
 \end{aligned}$$

GÜLDÜMNA

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_i+n_{is}-k-s+1}^{l_i+j_{sa}^{ik}-k-s+1} \dots$$

$$\sum_{n_{is}+j_{ik}-k_1}^{(n_i-j_s+1)} \sum_{(n_{ik}+j_{ik}-j_i-k_2)}$$

$$\sum_{n_{ik}+k_2-j_{ik}}^{(n_i-n_{is}-1)!} \sum_{(n_s=n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=i}^{()} \sum_{(j_s=1)}^{()}$$

GÜLDÜZYAN

$$\begin{aligned}
& \sum_{j_{ik} = l_i + n + j_{sa}^{ik} - D - s}^{l_i + j_{sa}^{ik} - l_i - s + 1} \binom{(\quad)}{\quad} \\
& \sum_{n_i = n + k}^n \sum_{(n_{ik} = n + k_2 - j_{ik} + 1)}^{(n_i - j_{ik} - k_1 + 1)} \sum_{n_s = n - j_i}^{n_{ik} + j_{ik} - j_i - k_2} \\
& \frac{(n_i - n_{ik} - k_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - k_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j_i - k_2)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - j_{ik} - l_s + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D + j_i - n - l_i} \sum_{(j_s = l_i + n - D - s + 1)}^{(l_s - k + 1)} \\
& \sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \binom{(\quad)}{\quad} (j_i = j_{ik} + l_i - l_{ik}) \\
& \sum_{n_i = n + k}^n \sum_{(n_{is} = n + k - j_s + 1)}^{(n_i - j_s + 1)} \\
& \sum_{n_{ik} = n_{is} + j_s - j_{ik} - k_1} \binom{(\quad)}{\quad} (n_s = n_{ik} + j_{ik} - j_i - k_2) \\
& \frac{(n_i + j_s - j_i - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge l = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} & \sum_{k=1}^{D+l_s} \sum_{(j_s=2)}^{n-l_i(j_{ik}-j_{sa}^{ik}+1)} \\ & \sum_{j_{ik}=j_i+l_{ik}-l_i}^{fz \Rightarrow j_s, j_{ik}, j_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_s+s-k)} \\ & \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\ & \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\ & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\ & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \end{aligned}$$

GÜLDÜNYA

$$\begin{aligned}
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=1}^{D+l_s+s-n} \sum_{j_s=2}^{l_s-k+1} \frac{(l_{ik} + j_s - 1)!}{(j_s + l_{ik} - l_i - j_s + 1)! \cdot (l_s + s - k + 1)!} \cdot \\
 & \sum_{j_i=1}^{n - l_i - k} \sum_{j_s=1}^{n - l_i - k - j_s + 1} \frac{(n - j_i - k)!}{(n - l_i - k - j_s + 1)! \cdot (n_{is} = n + k - j_s + 1)!} \cdot \\
 & \sum_{n_{ik}=1}^{n_{ik} - j_{ik} - k_1} \sum_{n_{ik}=1}^{n_{ik} + j_{ik} - j_i - k_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +
 \end{aligned}$$

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$$\begin{aligned}
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^l-1} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik}+1)}^{(l_{ik}+s-k-j_{sa}^{ik}+1)} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n-l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+l_{k_2})}^{(n_{is}+j_s-j_{ik}-l_{k_1}+j_{ik}-l_{k_2})} \\
 & \frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_{is}+1)!} \cdot \frac{(n_{ik}-l_{k_1}-1)!}{(n_{ik}-j_s-1)! \cdot (n_{is}+j_s-j_{ik}-l_{k_1})!} \\
 & \frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{is}+j_{ik}-n_s-j_i-l_{k_2})!} \\
 & \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & \frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!} \\
 & \frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s+l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!} \\
 & \frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} + \\
 & \sum_{k=i}^{()} \sum_{(j_s=1)}^{()} \\
 & \sum_{j_{ik}=j_i+l_{ik}-l_i} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})}^{(l_{ik}+s-i-l-j_{sa}^{ik}+1)}
 \end{aligned}$$

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$$\begin{aligned}
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=n-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_1)!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \\
& \frac{(l_{ik} - l_s - j_{sa} - 1)!}{(l_{ik} - j_{ik} - j_{sa} + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot \\
& \frac{(D - l_i - 1)!}{(D - j_i - n - l_i - 1)! \cdot (n - j_i)!} \cdot \\
& \sum_{k=1}^{D+l_s-n-l_i} \sum_{(j_s=j_{ik}-j_{sa}^k+1)}^{(j_s=j_{ik}-j_{sa}^k+1)} \\
& \sum_{j_{ik}=j_i+l_{ik}-l_i}^{(l_s+s-k)} \sum_{(j_i=l_{ik}+n+s-D-j_{sa}^{ik})} \\
& \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{()} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}^{()} \\
& \frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!} \cdot \\
& \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
& \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
\end{aligned}$$

$$D \geq n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} = j_i + j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z = \sum_{k=1}^{s-n-(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(n-(j_s-1))} \sum_{l_i=l_{ik}+n-D}^{l_s+j_{sa}^{ik}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(n-(j_s-1))} \sum_{n_i=n+\mathbb{k}}^n \sum_{(n_{is}=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=2)}^{(l_s-k+1)}$$

$$\sum_{j_{ik}=l_s+l_{sa}^{ik}-k+1}^{l_{ik}-k+1} \sum_{(j_s=2)}^{(n_i-j_s+1)}$$

$$\sum_{n+l_k}^{(n+l_k-j_s+1)} \sum_{(n_i-j_s+1)}$$

$$\sum_{n+l_k-j_{ik}}^{n_{is}+j_{ik}-k_1} \sum_{(n_s=n-j_i+1)}^{(n_i-j_{ik_2})}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!}$$

$$\frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

$$\sum_{k=D+l_s+s-n-l_i+1}^{i-1} \sum_{(j_s=2)}^{(l_s-k+1)}$$

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$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n+l_{k_2}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-l_{k_1}} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_1})}$$

$$\frac{(n_i-1)!}{(j_s-2)! \cdot (n_i-n_{is}+1)!}$$

$$\frac{(n_{is}-n_{ik}-l_{k_1}-1)!}{(j_{ik}-j_s-1)! \cdot (j_s-n_{is}-j_{ik}-l_{k_1})!}$$

$$\frac{(n_{ik}-l_{k_2}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_s-j_i-l_{k_2})!}$$

$$\frac{(n_s-j_i-n-1)! \cdot (n-j_i)!}{(n_s-j_i-1)!}$$

$$\frac{(l_s-k-1)!}{(l_s-j_s-k+1)! \cdot (j_s-2)!}$$

$$\frac{(l_{ik}-l_s-j_{sa}^{ik}+1)!}{(j_s-l_{ik}-j_{ik}-l_s)! \cdot (j_{ik}-j_s-j_{sa}^{ik}+1)!}$$

$$\frac{(D-l_i)!}{(D+j_i-n-l_i)! \cdot (n-j_i)!} +$$

$$\sum_{k=l}^{()} \sum_{(j_s=1)}^{()}$$

$$\sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()}$$

$$\sum_{n_i=n+l_k}^n \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+1)}^{(n_i-j_{ik}-l_{k_1}+1)} \sum_{(n_s=n-j_i+1)}^{(n_{ik}+j_{ik}-j_i-l_{k_2})}$$

$$\frac{(n_i-n_{ik}-l_{k_1}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}-l_{k_1}+1)!}$$

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$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!}$$

$$\frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik})!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$\sum_{k=0}^{D+l_s+s} \sum_{(j_s=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=j_{ik}+n-D}^{j_{ik}-k} \sum_{(j_i=j_{ik}+l_i-l_{ik})}$$

$$\sum_{n_i=n+\mathbb{k}} \sum_{(n_s=n+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2)}$$

$$\frac{(n_i + j_s - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(l_i - n - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$\frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!}$$

$$\frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}$$

$$D > n < n \wedge l_s \leq D - n + 1 \wedge$$

$$1 \leq j_s \leq j_i - j_{sa}^{ik} + 1 \wedge$$

$$j_{ik} - j_{sa}^{ik} - s \wedge$$

$$j_{ik} + s - j_{sa}^{ik} \leq j_i \leq n \wedge$$

$$l_{ik} - j_{sa}^{ik} + 1 > l_s \wedge l_i + j_{sa}^{ik} - s = l_{ik} \wedge$$

$$D + s - n < l_i \leq D + l_s + s - n - 1 \wedge$$

$$D \geq n < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa}^{ik} < j_{sa}^i - 1 \wedge j_{sa}^s < j_{sa}^{ik} - 1 \wedge$$

$$s: \{j_{sa}^s, \dots, \mathbb{k}_1, j_{sa}^{ik}, \dots, \mathbb{k}_2, j_{sa}^i\} \wedge$$

$$s > 4 \wedge s = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z \Rightarrow j_s, j_{ik}, j_i} = \sum_{k=0}^{D+l_s+s-n-l_i} \sum_{(j_s-2)}^{(n-D-j_{sa}^{ik})} \sum_{i_{ik}=l_{ik}+n-k+1}^{i_{ik}=j_{ik}+l_i-l_{ik}} \sum_{i_s=0}^{n-l_i-l_{ik}-k+1} \sum_{n_{ik}=0}^{n_{ik}+\mathbb{k}-(n_{is}+n+\mathbb{k}-j_s+1)} \sum_{n_{is}=0}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=0}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \cdot \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} +$$

GÜLDÜMNYA

$$\begin{aligned}
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{lk}-1}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)} \\
 & \sum_{n_{is}+j_s-j_{ik}}^{n_{is}+j_s-j_{ik}} \sum_{(n_{is}+j_{ik}-j_i-l_{k_2})}^{(n_{is}+j_{ik}-j_i-l_{k_2})} \\
 & \sum_{n_{ik}=n+l_{k_2}-j_i-1}^{n_{ik}=n+l_{k_2}-j_i-1} \sum_{(n_s=n-j_i-1)}^{(n_s=n-j_i-1)} \\
 & \frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_{is} - j_s + 1)!} \\
 & \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \\
 & \frac{(n_{ik} - n_{ik} - l_{k_2} - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_{ik} - n_s - j_i - l_{k_2})!} \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} + \\
 & \sum_{k=D+l_s+s-n-l_i+1}^{i^{l-1}} \sum_{(j_s=2)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=l_{ik}+n-D}^{l_{ik}-k+1} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{n_i=n+l_k}^n \sum_{(n_{is}=n+l_k-j_s+1)}^{(n_i-j_s+1)}
 \end{aligned}$$

GÜLDENWA

$$\begin{aligned}
 & \sum_{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_s=\mathbf{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_i-\mathbb{k}_2)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_s - 1)!}{(j_s - 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(j_s + l_{ik} - j_{ik} - l_s)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot \\
 & \frac{(D - l_i)!}{(D + \dots - \mathbf{n} - l_i)! \cdot (\mathbf{n} - j_i)!} + \\
 & \sum_{k=1}^{(\dots)} \sum_{l=1}^{(\dots)} \\
 & \sum_{j_{ik}=l_{ik}+\mathbf{n}-D}^{l_{ik}-i^{l+1}} \sum_{(j_i=j_{ik}+l_i-l_{ik})}^{(\dots)} \\
 & \sum_{n_i=\mathbf{n}+\mathbb{k}}^{\mathbf{n}} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_s=\mathbf{n}-j_i+1}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \\
 & \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
 & \frac{(l_{ik} - l_s - j_{sa}^{ik} + 1)!}{(l_{ik} - j_{ik} - l_s + 1)! \cdot (j_{ik} - j_{sa}^{ik})!}
 \end{aligned}$$

GÜLDÜMÜŞKA

$$\begin{aligned}
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!} \cdot \\
 & \sum_{k=1}^{D+l_s+s-n-l_i} \sum_{(j_s=l_{ik}+n-D-j_{sa}^{ik}+1)}^{(l_s-k+1)} \\
 & \sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{ik}+l_i-l_{ik})}^{()} \\
 & \sum_{(n+l_k)}^{n} \sum_{(n_{is}=n+l_k+1)}^{(n_{is}+1)} \\
 & \sum_{(n_{ik}=n_{is}+j_{ik}-k_1)}^{()} \sum_{(j_{ik}-k_2)}^{()} \\
 & \frac{(n_{is} - j_{is} - j_i - k_2 - j_{sa}^s)!}{(n_i - n - k_2 - k_2)! \cdot (j_s + j_i - j_{sa}^s)!} \cdot \\
 & \frac{(l_s - k - 1)!}{(l_s - j_s - k + 1)! \cdot (j_s - 2)!} \cdot \\
 & \frac{(D - l_i)!}{(D + j_i - n - l_i)! \cdot (n - j_i)!}
 \end{aligned}$$

GÜLDÜZÜMÜ

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, 2.3.1.1.1.1.2.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.3.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/4

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, 2.3.1.1.1.1.2.1/203
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.2.1/228

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.2.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.1.3.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.3.1/228
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.1.3.1/290

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.1.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.1.1/3

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.2.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.2.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin son durumunun bulunabileceği olaylara göre

- simetrik olasılık, 2.3.1.1.1.4.3.1/3
- toplam düzgün simetrik olasılık, 2.3.1.2.1.4.3.1/3
- toplam düzgün olmayan simetrik olasılık, 2.3.1.3.1.4.3.1/4

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, 2.3.1.2.1.1.1.1/236

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
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 durumda
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 durumda 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 durumda 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 durumda 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 durumda
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 durumda
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 durumda
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 durumda 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 durumda 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 durumda 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 durumda simetrisinin her
durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.4.1.1.1/838

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumda 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, 2.3.1.2.5.2.3.1/4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.5.2.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.1.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.2.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.1.3.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.1.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.2.1/12
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

simetrik olasılık, 2.3.1.1.8.2.3.1/8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.8.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.2.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.1.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.1.1/6
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu

bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.2.1/6
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.2.3.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.2.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.1.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.2.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.2.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.4.3.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.4.3.1/3-4
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.4.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.1.1/4-5
 toplam düzgün simetrik olasılık, 2.3.1.2.6.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.1.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.2.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.2.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.6.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.6.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.1.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.1.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.2.1/6
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.2.1/9

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.6.7.3.1/4-5
toplam düzgün simetrik olasılık, 2.3.1.2.6.7.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.6.7.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun

bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.1.1.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.1.3.1/7-8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.1.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.2.1/12
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.3.1/8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

herhangi bir ve son duruma bağlı simetrik olasılık, 2.3.1.1.9.2.3.1/8
toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.1.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.4.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.2.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.4.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.3.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.4.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.4.4.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.4.4.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.2.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.6.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.6.3.1/7-8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.6.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.1.1/12

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.7.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.2.1/12
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.7.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

simetrik olasılık, 2.3.1.1.9.7.3.1/8
 toplam düzgün olmayan simetrik olasılık, 2.3.1.3.9.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.1.1/5
 toplam düzgün simetrik olasılık, 2.3.1.2.7.1.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.1.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.2.1/5
 toplam düzgün simetrik olasılık, 2.3.1.2.7.1.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.1.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.1.3.1/5
 toplam düzgün simetrik olasılık, 2.3.1.2.7.1.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.1.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

simetrik olasılık, 2.3.1.1.7.2.1.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.2.2.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.2.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.2.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.2.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.2.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.4.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.4.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.4.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.6.1.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.6.2.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.6.3.1/5

toplam düzgün simetrik olasılık, 2.3.1.2.7.6.3.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.6.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.1.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.7.1.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.7.1.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.2.1/7

toplam düzgün simetrik olasılık, 2.3.1.2.7.7.2.1/3-4

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.7.7.2.1/12

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre simetrik olasılık, 2.3.1.1.7.7.3.1/5

toplam düzgün simetrik olasılık,
2.3.1.2.7.7.3.1/3-4

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.7.7.3.1/8

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu simetrisinin ilk
herhangi iki ve son durumunun
bulunabileceği olaylara göre herhangi bir
ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.1.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.1.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.1.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.2.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.1.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.1.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.2.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.2.2.1/22

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.2.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.2.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.2.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımlı
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.4.3.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.4.3.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.10.6.1.1/12-13

toplam düzgün olmayan simetrik
olasılık, 2.3.1.3.10.6.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı
dizilimsiz bağımlı durumlu bağımsız
simetrisinin ilk herhangi iki ve son
durumunun bulunabileceği olaylara göre
herhangi bir ve son durumuna bağlı

simetrik olasılık, 2.3.1.1.10.6.2.1/12-13

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.10.6.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı simetrik olasılık, 2.3.1.1.10.6.3.1/12-13

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.10.6.3.1/23

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı simetrik olasılık, 2.3.1.1.10.7.1.1/22

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.10.7.1.1/23

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı simetrik olasılık, 2.3.1.1.10.7.2.1/22

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.10.7.2.1/23

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı simetrik olasılık, 2.3.1.1.10.7.3.1/12-13

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.10.7.3.1/13

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.1.1.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.1.1.1/17

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.2.1.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.1.2.1/17

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.3.1.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.1.3.1/17

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.2.1.1/29

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.2.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.2.2.1/29

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.2.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı simetrik olasılık, 2.3.1.1.11.2.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.2.3.1/17

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.1.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.4.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.2.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.4.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.4.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.4.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.1.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.6.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.2.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.6.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.6.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.6.3.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.1.1/29

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.7.1.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.2.1/29

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.7.2.1/30

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrisinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

simetrik olasılık,
2.3.1.1.11.7.3.1/16

toplam düzgün olmayan simetrik olasılık, 2.3.1.3.11.7.3.1/17

VDOİHİ'de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ'de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlarında, simetrisinin ilk herhangi bir 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 bir 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 bir 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