

VDOİHİ

Bağımlı ve Bir Bağımsız
Olasılıklı Farklı Dizilimli Bir
Bağımlı-Bir Bağımsız ve
Bağımlı-Bir Bağımsız
Durumlu Simetrinin Bağımsız
Durumla Başlayan
Dağılımlardaki Kalan Düzgün
Olmayan Simetrik Olasılığı
Cilt 2.1.21.2

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Matematik / İstatistik / Olasılık

ISBN: 978-625-7774-00-0

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VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrisinin Bağımsız Durumla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılığı-Cilt 2.1.21.2

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KÜTÜPHANE BİLGİLERİ

Yılmaz, İsmail.

VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrisinin Bağımsız Durumla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılığı-Cilt 2.1.21.2 / İsmail YILMAZ

e-Basım, s. XXV + 557

Kaynakça yok, izin var

ISBN: 978-625-7774-00-0

1. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli kalan düzgün olmayan simetrik olasılık 2. Bir Bağımlı-bir bağımsız durumlu simetrisinin kalan düzgün olmayan simetrik olasılığı 3. Bağımlı-bir bağımsız durumlu simetrisinin kalan düzgün olmayan simetrik olasılığı

Dili: Türkçe + Matematik Mantık

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 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.

Yazar ve VDOİHİ

Yazar doktora tez çalışmasına kadar, dijital makinalarla sayısallaştırılabilen fakat insan tarafından sayısallaştırılmayan verileri, anlamlı en küçük parça (akp)'larına ayırıp skorlandırarak, sayısallaştırma problemini çözmüştür. Anlamlı en küçük parçaların Türkçe kısaltmasını olasılığın birimlendirilebilir olmasından dolayı, olasılığın birimini akp olarak belirlemiştir. Matematiğinin başlangıcı olasılık olan tüm bağımlı değişkenlerde olabileceği gibi aynı zamanda enformasyonunda temeli olasılık olduğundan, enformasyon içeriğinin de doğal birimi akp'dir.

Verilerin objektif lojik simplisitede sayısallaştırılmasıyla Veri Değişkenleri Olasılık ve İhtimal Hesaplama İstatistiği (VDOİHİ) geliştirilmeye başlanmıştır. Doktora tezinin nitel verilerini, bir ilk olarak, -1, 0, 1 skorlarıyla sayısallaştırarak iki tabanlı olasılığı sınıflandırıp; pozitif, negatif (ve negatiflerdeki pozitif skorlar için ayrıca eşitlik tanımlaması yapıp), ilişkisiz ve sıfır skor aşamalarında değerlendirme yöntemi geliştirmiştir. Bu yöntemin tüm kavramlarının; tanım ve formülleriyle sınırları belirlenip, kendi içinde tam bir matematiği geliştirilip, uygulamalarla veri elde edilmiş, verilerin hem değerlendirmeleri hem de bulguların sözel ifadelerini veren yazılım paket programı yapılarak, bir disiplinin tüm yönleri yazar tarafından gerçekleştirilerek doktorasını bilim tarihinde yine bir ilk ile tamamlamıştır. Nitel verilerden elde edilebilecek bulguların sözel ifadelerini veren yazılım paket programı gerçek ve olması gereken yapay zekanın ilk örneğidir.

Yazar, ölçme araçları için madde tekniği tanımlayıp, değerlendirme yöntemlerini belirginleştirilerek, eğitimde ölçme ve değerlendirme için beş yeni boyut aktiflemiştir. Ölçme ve değerlendirmeye, aktif ve pasif değerlendirme tanımlaması yapılarak, matematiği geliştirilmiş ve geliştirilmeye devam edilmektedir. Yazar yaptığı çalışmalarda Problem Çözüm Tekniklerini (PÇT) aktifleyerek; verilenler-istenilenler (Vİ), serbest cisim diyagramı/çizim (SCD), tanım, formül ve işlem aşamalarıyla, eğitimde ölçme ve değerlendirmede beş boyut daha aktiflemiştir. PÇT aşamalarını bilgi düzeyi, çözümlerin sonucunu da başarı düzeyi olarak tanımlayıp, ölçme ve değerlendirme için iki yeni boyut daha kazandırmıştır. Sınıflandırılmış iki tabanlı olasılık yönteminin aşamaları ve negatiflerdeki pozitiflerle, ölçme ve değerlendirmeye beş yeni boyut daha kazandırılmıştır. Verilerin; Shannon eşitliği veya VDOİHİ'de verilen olasılık-ihtimal eşitlikleriyle değerlendirmeyi bilgi

merkezli, matematiksel fonksiyonlarla (lineer, kuvvet, trigonometri “sin, cos, tan, cot, sinh, cosh, tanh, coth”, ln, log, eksponansiyel v.d.) değerlendirmeyi ise birey merkezli değerlendirme, sınırlandırması getirerek, değerlendirmeye iki yeni boyut daha kazandırmıştır. Ayrıca $\frac{a}{b} + \frac{c}{d}$ ve $\frac{a+c}{b+d}$ matematiksel işlemlerinin anlam ve sonuç farklılıklarını, değerlendirme için aktifleyerek, değerlendirmeye iki yeni boyut daha kazandırmıştır. Böylece eğitimde ölçme ve değerlendirmeye; PÇT aşamaları 5×5 , yine PÇT'nin bilgi ve başarı düzeylerinin 2×2 , sınıflandırılmış iki tabanlı olasılık yöntemi 5×5 , bilgi ve birey merkezli ölçme ve değerlendirmeyle 2×2 , matematiksel işlem farklılıklarıyla 2×2 olmak üzere 40.000 yeni boyut kazandırmıştır. Bu boyutlara yukarıda verilen matematiksel fonksiyonlarında dahil edilmesiyle en az (13×13) 6.760.000 yeni boyutun primitif düzeyde, ölçme ve değerlendirmeye, katılabilmesinin yolu yazar tarafından açılmış olmasına karşılık, günümüze kadar yukarıda bahsedilen boyutların ilgi düzeyinde, eğitimde ölçme ve değerlendirmede, tek boyuttan öteye (lineer değerlendirme) geçirilememiştir. Bu noktadan sonra, ölçme ve değerlendirmeye fark istatistiğiyle boyut kazandırılabilmiştir. Fark istatistiğiyle kazandırılan boyutlarında hem ihtimallerden çıkarılacak yeni boyutlar hem de ihtimallerin fark istatistiğinden türetilebilecek boyutların yanında güdük kalacağı kesin! Ölçme ve değerlendirmeye yeni boyutlar kazandırılmasının en önemli amaçları; beynin öğrenme yapısının kesin bir şekilde belirlenebilmesi ve öğretim süreçlerinin bilimsel bir şekilde yapılandırılabilmesidir. Beyinle ilgili VDOİHİ Bağımlı Olasılık Cilt 1'in giriş bölümünde verilenlerin genişletilmesine ileride devam edilecektir. Fakat öğretim süreçlerinin; teorik öngörülerle ve/veya insanın yaratılışına uyma olasılığı son derece düşük doğrusal değerlendirmelerle yapılandırılması, yazar tarafından insanlığa ihanet olarak görüldüğünden, doğru verilerle eğitimin bilimsel niteliklerde yapılandırılabilmesi için, ölçme ve değerlendirmeye yeni boyutlar kazandırılmaktadır.

Günümüze kadar yaşayan dillere 10 kavram bile kazandırabilen hemen hemen yokken, yayınlanan VDOİHİ ciltlerinde (cilt 1, 2.1.1, 2.2.1, 2.3.1 ve 2.3.2) yaklaşık 1000 kavram Türkçeye kazandırılarak ciltlerin dizinlerinde verilmiştir. Bu kavramların tüm sınırları belirlenip, açık ve anlaşılır tanımlarıyla birlikte, eşitlikleri de verilmiştir. Bu düzeyde yani bilimsel düzeyde, bilime kavramlar Türkçe olarak kazandırılmıştır. Yayınlanacak VDOİHİ'lerde bilime Türkçe kazandırılacak kavramların on binler düzeyinde olacağı öngörülmektedir.

VDOİHİ'de verilen eşitlikler aynı zamanda dillerinde eşitlikleridir. Diğer bir ifadeyle dillerin matematik yapıları VDOİHİ ile ortaya çıkarılmıştır. Türkçe ve İngilizcenin olasılık yapıları VDOİHİ'de belirlenerek, formüllerin dillere (ağırlıklı Türkçe) uygulamalarıyla hem dillerin objektif yapıları belirginleştiriliyor hem de makina-insan arası iletişimde, makinaların iletişim kurabilmesinde en üst dil olarak Türkçe geliştiriliyor. İleriki ciltlerde Türkçenin matematik mantık yapısı da verilerek, Türkçe'nin makinaların iletişim dili yapılması öngörülmektedir.

Bilim(de) kesin olanla ilgileni(li)r, yani bilim eşitlik ve/veya yasa üretir veya eşitliklerle konuşur. Bunun mümkün olmadığı durumlarda geçici çözümler üretilebilir. Bu geçici çözümler veya yöntemleri, her hangi bir nedenle bilimsel olamaz. Bilimin yasa veya eşitlik üretimindeki kırılma, Cebirle başlamıştır. Bilimdeki bu kırılma mühendisliğin, teknolojiye

dönüşümünün başlangıcıdır. Bilimdeki kırılma ve mühendisliğin teknolojiye dönüşümü, insanlığın gelişimini hızlandırmakla birlikte, bu alanda çalışanların; ego, öngörüsüzlük, ufuksuzluk ve beceriksizlikleri gibi nedenlerden dolayı, insanlığın gelişimi ivmelendirilemediği gibi bu basiretsizliklerle insanlığa pranga vurmaya bile kısmen başarabilmişlerdir. VDOİHİ ve telifli eserlerinde verilen; değişken belirleme, eşitlik-yasa belirleme ve bunların sözel yorumlarını yapabilen yazılımlarla, ve yapılabilecek benzeri yazılımlarla, insanlığın gelişimi ivmelendirilebileceği gibi isteyen her bireye, gerçeklerin (VDOİHİ Bağımlı Olasılık Cilt 1'in giriş bölümünde tanımlanmıştır) bilgi ve teknolojisine daha kolay ulaşabilme imkanı sağlanmıştır.

Şuana kadar zaruri tüm tanımların, zaruri tüm eşitliklerin ve bunların epistemolojileriyle (0. epistemolojik seviye) en azından 1. epistemolojik seviye bilgilerinin birlikte verildiği ya ilk yada ilk örneklerinden biri VDOİHİ'dir. Bu kapsamda VDOİHİ'de şimdiye kadar yaklaşık 1000 kavramın, bilime kazandırıldığı yukarıda belirtilmiştir. Bu kapsamda yine VDOİHİ'de 5000'in üzerinde orijinal; ilk ve yeni eşitlik geliştirilmiştir. Bu eşitlikler kasıtlı olarak ilk defa dört farklı yapıda birlikte verilmektedir. Bu eşitlikler; a) sabit değişkenli (örneğin; bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitlikleri) b) sabit değişkenli işlem uzunluklu (örneğin; simetrisinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitliği) c) hem değişken uzunluklu hem işlem uzunluklu (örneğin; simetrisinin her durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık eşitliği) d) sabit değişkenli zıt işlem uzunluklu (bu eşitlik VDOİHİ cilt 2.1.3'ten itibaren verilecektir. Örneğin; $\sum_{i=5}^n \mp$) yapılar da verilmektedir. Sabit değişkenli eşitliklerle, bilim ve teknolojiye gereksinimlerin çoğunluğu karşılanabilirken, geleceğin bilim ve teknolojisinde ihtiyaç duyulabilecek eşitlik yapıları kasıtlı olarak aktiflenmiş veya geliştirilmiştir.

İnsanın hem öğrenmesinin desteklenmesi hem de bilginin teknolojiyle ilişkisini kurabilmesi için özellikle VDOİHİ Soru Problem İspat Çözümleri ciltlerinde, soru ve problem birbirinden ayrılarak yeniden tanımlanıp sınırları belirlenmiştir. Böylece örnek, soru, problem ve ispat arasındaki farklılıklar belirginleştirilmiştir. Ayrıca yine insanın hem öğrenmesinin desteklenmesi hem de bilginin teknolojiyle ilişkisini daha kesin kurabilmesi için Sertaç ÖZENLİ'nin İlmî Sohbetler eserinin M5-M6 sayfalarında verilen epistemolojik seviye tanımları; örnek, soru, problem ve ispatlara uyarlanmıştır. Böylece; örnek, soru, problem ve ispatların epistemolojileriyle, hem bilgiyle-öğrenme arasında hem de bilgi-teknoloji arasında yeni bir köprü kurulmuştur.

Geride bıraktığımız yüzyılda, özellikle Turing ve Shannon'un katkılarıyla iki tabanlı olasılığa dayalı dijital teknoloji kurulabilmiştir. Kombinasyon eşitliğiyle iki tabanlı simetrik olasılıklar hesaplanabildiğinden, ihtimalleri de kesin olarak hesaplanabilir. İki tabanlı büyük tabanların; bağımsız olasılık, bağımlı olasılık, bağımlı-bağımsız olasılık, bağımlı-bağımlı olasılık veya bağımsız-bağımsız olasılık dağılımlarındaki simetrik olasılıkları VDOİHİ'ye kadar kesin olarak hesaplanamadığından (hatta VDOİHİ'ye kadar olasılığın sınıflandırılması bile yapılmamış/yapılamamıştır), farklı tabanlarda çalışabilecek elektronik teknolojisi kurulamamıştır. VDOİHİ'de verilen eşitliklerle, hem farklı olasılık dağılımlarında hem de her tabanda simetrik olasılıkların olabilecek her türü, hesaplanabilir kılındığından, ihtimalleri de

kesin olarak hesaplanabilir. Böylece VDOİHİ’de verilen eşitliklerle hem istenilen tabanda hem de istenilen dağılım türlerinde çalışabilecek elektronik teknolojisinin temel matematiği kurulmuştur. Bundan sonraki aşama bilginin-ürüne dönüşme aşamasıdır. Ayrıca VDOİHİ’de özellikle uyum eşitlikleri kullanılarak farklı dağılım türlerine geçişin yapılabileceği eşitliklerde verilerek, dijital teknoloji yerine kurulacak her tabanda ve/veya her dağılım türünde çalışan teknolojinin istenildiğinde de hem farklı taban hem de farklı dağılım türlerine geçişinin yapılabileceği matematik eşitlikleri de verilmiştir. Böylece tek bir tabana dayalı dijital teknoloji yerine, sonsuz çalışma prensibine dayalı elektronik teknolojinin bilimsel-matematiksel yapısı VDOİHİ ile kurulmuş ve kurulmaya devam etmektedir.

VDOİHİ’de verilen eşitlikler aynı zamanda en küçük biyolojik birimden itibaren anlamlı temel biyolojik birimin “genetiğin” temel matematiğidir. En küçük biyolojik birim olarak DNA alındığında, VDOİHİ’de verilen eşitlikler DNA, RNA, Protein, Gen ve teknolojilerinin temel eşitlikleridir. Bu eşitlikler VDOİHİ’de teorik düzeyde; DNA, RNA, Protein, Gen ve hastalıklarla ilişkilendirilmektedir. Bu eşitlikler gelecekte atom düzeyinden başlanarak en kompleks biyolojik birimlere kadar tüm biyolojik birimlerin laboratuvar ortamlarında üretiminin planlı ve kontrollü yapılabilmesinde ihtiyaç duyulacak temel eşitliklerdir. Böylece bir canlının, örneğin insanın, atom düzeyinden başlanarak laboratuvar ortamında üretilebilir/yapılabilir kılınmasının, matematiksel yapısı ilk defa VDOİHİ’de verilmektedir. Elbette bir insanın laboratuvar ortamında üretilebilir olmasıyla, bunun gerçekleştirilmesi aynı değildir. Gerçekleştirilebilmesi için dini, etik, ahlaki v.d. aşamalarda da doğru kararların verilmesi gerekir. Fakat organların v.b. biyolojik birimlerin laboratuvar ortamında üretilmesinin önünde benzeri aşamaların engel oluşturduğu söylenemez. İhtiyaç halinde bir insanın; organının, sisteminin veya uzvunun v.b. her yönüyle aynısının laboratuvar ortamında üretilmesi veya soyu tükenmiş bir canlının yeniden üretimi veya soyunun son örneği bir canlı türünün devamı VDOİHİ’de verilen eşitlikler kullanılarak sağlanabilir. Biyolojik bir yapının laboratuvar ortamında üretimiyle, örneğin herhangi bir makinanın üretilmesinin İslam açısından aynı değerli olduğunu düşünüyorum. Bu yaradan’ın bize ulaşabilmemiz için verdiği bilgidir. Eğer ulaşılması istenmeseydi, bizim öyle bir imkanımızda olamazdı. Fakat bilginin, bizim ulaşabileceğimiz bilgi olması, yani gerçeğin bilgisi olması, her zaman ve her durumda uygulanabilir olacağı anlamına gelmez. Umarım yapmak ile yaratmak birbirine karıştırılmaz!

VDOİHİ’de hem sonsuz çalışma prensibine dayalı elektronik teknolojisinin matematiksel yapısı hem de Telifli eserlerinde ve VDOİHİ’de, ilk defa yapay zeka çağının kapılarını aralayan çalışmalar yapılmıştır. VDOİHİ cilt 2.1.1’in giriş bölümünde yapay zeka ve çağının tanımı yapılarak, kütüphane ve referans bilgileriyle ilişkilendirilmiştir. Daha sonra VDOİHİ ve Telifli eserlerinde insanlığın gelişimini ivmelendirecek; yapay zeka görev kodları, verilerin analizleriyle ait olduğu disiplinin belirlenmesi, verinin analizinden verilen ve istenilenlerin belirlenmesi, değişken analizi, eksik değişkenlerin belirlenmesi, eksik değişkenlerin verilerinin üretimi, değişkenler arası eşitliklerin kurulması ve elde edilen bilgilerin sözel ifadeleriyle bilim ve teknoloji için gerekli bilgiyi üretebilen yazılımlar verilmiştir. Hem bu yazılımlarla hem de benzeri yazılımlarla, bilim insanları tarafından üretilemeyen bilgi ve teknolojilerin isteyen her kişi tarafından üretilebilir olması sağlanmıştır. Ayrıca kütüphane ve referans bilgilerinin üretiminde, olasılık dağılımları üzerinden çalışan makinaların bir olayın

tüm yönlerini (olasılıklarını) kullanmaları sağlanarak, tıpkı insan gibi düşünebilmesi sağlanmıştır. Böylece makinaların özgürce düşünebilmesinin önündeki engeller kaldırılmıştır. Gerçek yapay zeka pahalı deneylere ihtiyacı ortadan kaldırarak, insanlara yaradan'ın tanıdığı eşitliklerin (matematiksel eşitlik değil!), belirli insanlar tarafından saptırılarak, diğerlerinin eşitlik ve özgürlüklerinin gasp edilmesinin önünde güçlü bir engel teşkil edecektir. Bugüne kadar artificial intelligence çalışmalarıyla sadece ve sadece kütüphane bilgisinin bir kısmı üretilebildiği ve kütüphane bilgisi üretebilen teknoloji geliştirildiğinden, bunlar yapay zekanın öncü çalışmalarından öte geçip yapay zeka konumunda düşünülemez. Gerçek yapay zeka hem kütüphane hem de referans bilgisi üretebilir olması gerektiğinden; a) yazar tarafından doktora tez çalışması başta olmak üzere belirli çalışmalarında kütüphane bilgisinin ileri örnekleri başarıldığından, b) ilk defa VDOİHİ ve Telifli eserlerinde referans bilgisini üreten yazılımlar başarıldığından ve c) yapay zekanın gereksinim duyabileceği dijital teknoloji yerine, sonsuz çalışma prensibine dayalı elektronik teknolojisinin bilimsel-matematiksel yapısı yazar tarafından geliştirildiğinden, insanlığın bugüne kadar uyguladığı teamüller gereği adlandırmanın da Türkçe yapılması elzem ve adil bir zorunluluktur. Bu nedenle insan biyolojisinin ürünü olmayan zeka "yapay zeka" ve insan biyolojisinin ürünü olmayan zekayla insanlığın gelişiminin ivmelendirildiği zaman periyodu da "yapay zeka çağı" olarak adlandırılmalıdır.

Yazar tarafından VDOİHİ'de, Cebirden günümüze; a) bilimsel gelişim, olması gereken veya olabilecek gelişime göre düşük olduğundan, b) teorik çalışmaların omurgasının matematiğe terk edilmesi ve matematikçilerinde üzerlerine düşeni yeterince yerine getirememelerinden dolayı, c) yapay zeka karşısında buhrana düşülmesinin önüne geçilebilmesi ve d) kainatın en kompleks birimi olan insan beynine yakışır bilimsel gelişimin başarılabilmesi için, yasa/eşitliklerin, uyum ve genel yapıları, olasılık üzerinden belirlenmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Büyük Farklı Dizilimli Simetrik Olasılık Cilt 2.2.1'de insanlığın bilimsel ve teknolojik gelişimini ivmelendirebilecek uyum çağının tanımı yapılarak, VDOİHİ'de ilk defa yasa/eşitliklerin, olasılık eşitlikleri üzerinden uyum yapıları verilmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Simetrik Olasılık Cilt 2.3.1'de insanlığın bilimsel ve teknolojik gelişimini ivmelendirebilecek genel çağın tanımı yapılarak, VDOİHİ'de yasa/eşitliklerin, olasılık eşitlikleri üzerinden genel yapıları verilmiştir.

Yazar tarafından VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Simetrik Bulunmama Olasılığı Cilt 2.3.2 insanlığın bilimsel ve teknolojik gelişimini ivmelendirebilecek dördüncü bir çağ olarak, gerçek zaman ufku ötesi çağı tanımlanmıştır. Bu çağın tanımlanmasında; Sertaç ÖZENLİ'nin İlmi Sohbetler eserinin R39-R40 sayfalarından yararlanılarak, kapak sayfasındaki ve T21-T22'inci sayfalarında verilen şuuruluğun ork or modelinin özetinin gösterildiği grafikten yararlanılmıştır. Doğada rastlanmayan fakat kuantum sayılarıyla ulaşılabilen atomlara ait bilgilerimiz, gerçek zaman ufku ötesi bilgilerimizin, gerçekleştirilmiş olanlarıdır. Gerçekleştirilebilecek olanlarından biri ise kainatın herhangi bir

yerinde yaşamını sürdüren herhangi bir canlıdan henüz haberdar bile olmadan, var olan genetik bilgi ve matematiğimizle ulaşılabilir olan tüm bilgilerine ulaşılmasıdır.

Özellikle; sonsuz çalışma prensibine dayalı elektronik teknolojisi, yapay zeka, gerçek zaman ufku ötesi bilgilerimizin temel eşitliklerinin verilebilmesi, başlangıçta kurucusu tarafından yapılabileceklerin ilerleyen zamanlarda o disiplinin cazibe merkezine dönüşerek insan kaynaklarının israfının önlenmesi nedenleriyle ve en önemlisi Yaradan'ın bizlere verdiği adaletin insan tarafından saptırılamaması için; VDOİHİ, bugüne kadarki eserlerle kıyaslanamayacak ölçüde daha kapsamlı verilmeye çalışılmaktadır.

Yazar VDOİHİ'nin ciltlerini, Türkçe ve insanlığın tek evrensel dili olan matematik-mantık dillerinde yazmaktadır. Yazar eserlerinden insanlığın aynı niteliklerle yararlanabilmesi için her kişiye eşit mesafede ve anlaşılabilirlikte olan günümüze kadar insanlığın geliştirebildiği yegane evrensel dilde VDOİHİ ciltlerini yazmaya devam edecektir.

VDOİHİ ve telifli eserleri ile bitirilen veya sonu başlatılanlar;

- ✓ VDOİHİ'de dillerin matematiği kurularak, o dil için kendini mihenk taşı gören zavallılar sınıfı
- ✓ Baskın dillerin, dünya dili olabilmesi
- ✓ VDOİHİ ve Telifli eserlerinde verilen eşitlik ve yasa belirleme yazılımlarıyla, gerçeklerden uzak ve ufuksuz sözde akademisyenlere insanlığın tahammülü
- ✓ Bilim ve teknolojide sermayeye olan bağımlılık
- ✓ Sermaye birikiminin gücü
- ✓ Primitif ölçme ve değerlendirme

Sanırım bilgi ve teknolojiye kaderimiz veriyle ilişkilendirilmiş.

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Simge ve Kısaltmalar

n : olay sayısı

n : bağımlı olay sayısı

m : bağımsız olay sayısı

n_i : dağılımın ilk bağımlı durumun bulunabileceği olayın, dağılımın ilk olayından itibaren sırası

n_{ik} : simetride, simetrinin aranacağı durumdan önce bulunan bağımlı durumun (j_{ik} 'da bulunan durum), bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabileceği olayların, ilk olaydan itibaren sırası veya simetrinin iki bağımlı durum arasında bağımsız durumun bulunduğu bağımsız durumdan önceki bağımlı durumun, bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabileceği olayların ilk olaydan itibaren sırası

n_s : simetrinin aranacağı bağımlı durumunun (simetrinin sonuncu bağımlı durumu) bulunabileceği olayların ilk olaya göre sırası

n_{sa} : simetrinin aranacağı bağımlı durumunun bulunabileceği olayların ilk olaya göre sırası veya bağımlı olasılıklı dağılımların j^{sa} 'da bulunan durumun (simetrinin j_{sa} 'daki bağımlı durum) bir bağımlı ve bir bağımsız olasılıklı dağılımlarda bulunabileceği olayların, dağılımın ilk olayından itibaren sırası

l : bağımsız durum sayısı

l : simetrinin bağımsız durum sayısı

ll : simetrinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

l : simetrinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

lk : simetrinin bağımlı durumları arasındaki bağımsız durumların sayısı

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

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

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

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

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

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

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

j_{sa} : simetriyi oluşturan bağımlı durumlar arasında simetrisinin aranacağı durumun bulunduğu olayın, simetrisinin 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 : simetrisinin bağımlı durum sayısı

s : simetrik durum sayısı. Simetrisinin bağımlı ve bağımsız durum sayısı

n_s : simetrisinin bağımlı olay sayısı

m_I : simetrisinin bağımsız olay sayısı

d : seçim içeriği durum sayısı

m : olasılık

M : olasılık dağılım sayısı

U : uyum eşitliği

u : uyum derecesi

s_i : olasılık dağılımı

S : simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu simetrik olasılık

S^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan simetrik olasılık

S^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan düzgün simetrik olasılık

S^{DOS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan düzgün olmayan simetrik olasılık

$S_{j_s, j_{ik}, j_{sa}}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i, j_s, j_{ik}, j_{sa}}$: düzgün ve düzgün olmayan simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{j_s, j_{ik}, j_i} : simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i, j_s, j_{ik}, j_i} : düzgün ve düzgün olmayan simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{D=n}$: bağımlı olay sayısı bağımlı durum sayısına eşit bağımlı olasılıklı "farklı dizilimli" dağılımlarda simetrik olasılık

$S_{D>n}$: bağımlı olay sayısı bağımlı durum sayısından büyük bağımlı olasılıklı "farklı dizilimli" dağılımlarda simetrik olasılık

$D=n<nS \equiv S$: simetri bağımlı durumlardan oluştuğunda, bağımlı ve bir bağımsız olasılıklı dağılımlarda simetrik olasılık

S_0 : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız simetrik olasılık

S_0^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan simetrik olasılık

S_0^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün simetrik olasılık

S_0^{DOS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün olmayan simetrik olasılık

S_D : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı simetrik olasılık

S_D^{DS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan simetrik olasılık

S_D^{DSS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün simetrik olasılık

S_D^{DOS} : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün olmayan simetrik olasılık

${}_0S$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu simetrik olasılık

${}_0S^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan simetrik olasılık

${}_0S^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün simetrik olasılık

${}_0S^{DOS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün olmayan simetrik olasılık

${}_0S_0$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız simetrik olasılık

${}_0S_0^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan simetrik olasılık

${}_0S_0^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün simetrik olasılık

${}_0S_0^{DOS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün olmayan simetrik olasılık

${}_0S_D$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı simetrik olasılık

${}_0S_D^{DS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan simetrik olasılık

${}_0S_D^{DSS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün simetrik olasılık

${}_0S_D^{DOS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün olmayan simetrik olasılık

${}_0S$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-

bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik olasılık

S_{j_i} : simetrinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{2,j_i} : iki durumlu simetrinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_i} : düzgün ve düzgün olmayan simetrinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,2,j_i}$: düzgün ve düzgün olmayan iki durumlu simetrinin son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{j_s,j_i} : simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_s,j_i} : düzgün ve düzgün olmayan simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,2,j_s,j_i}$: düzgün ve düzgün olmayan iki durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{j_s,j^{sa}}$: simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{i,j_s,j^{sa}}$: düzgün ve düzgün olmayan simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{j_{ik},j_i} : simetrinin her durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

S_{i,j_{ik},j_i} : düzgün ve düzgün olmayan simetrinin her durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik olasılık

$S_{j^{sa}\leftarrow}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j^{sa}}^{DSD}$: simetrinin durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{artj^{sa}\leftarrow}$: simetrinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s,artj^{sa}\leftarrow}$: simetrinin ilk durumuna göre herhangi art arda iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s,j_i\leftarrow}$: simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

S_{j_s,j_i}^{DSD} : simetrinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_s, j^{sa} \Leftarrow}$: simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j^{sa}}^{DSD}$: simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_{ik}, j^{sa} \Leftarrow}$: simetrisinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_{ik}, j^{sa}}^{DSD}$: simetrisinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{j_s, j_{ik}, j^{sa} \Leftarrow}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j^{sa}}^{DSD}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{\Leftarrow j_s, j_{ik}, j^{sa} \Leftarrow}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j_i \Leftarrow}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j_s, j_{ik}, j_i}^{DSD}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün simetrik olasılık

$S_{\Leftarrow j_s, j_{ik}, j_i \Leftarrow}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara

göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik bitişik olasılık

$S_{j^{sa} \Rightarrow}$: simetrisinin durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{art, j^{sa} \Rightarrow}$: simetrisinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, art, j^{sa} \Rightarrow}$: simetrisinin ilk durumuna göre herhangi art arda iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, j_i \Rightarrow}$: simetrisinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, j^{sa} \Rightarrow}$: simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_{ik}, j^{sa} \Rightarrow}$: simetrisinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, j_{ik}, j^{sa} \Rightarrow}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, j_{ik}, j^{sa}}^{DOSD}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizilimli düzgün olmayan simetrik olasılık

$S_{\Rightarrow j_s, j_{ik}, j^{sa} \Rightarrow}$: simetrisinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizilimli simetrik ayırım olasılığı

$S_{j_s, j_{ik}, j_i \Rightarrow}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizimli simetrik ayırım olasılığı

$S_{j_s, j_{ik}, j_i}^{DOSD}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizimli düzgün olmayan simetrik olasılık

$S_{\Rightarrow j_s, j_{ik}, j_i}$: simetrisinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı bağımlı olasılıklı farklı dizimli simetrik ayırım olasılığı

$S_{j_s, j_i \Leftarrow}$: simetrisinin durumuna bağlı bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

S_{j_s, j_i}^{DOSD} : simetrisinin durumuna bağlı bağımlı olasılıklı farklı dizimli düzgün olmayan simetrik olasılık

$S_{art, j_s, j_i \Leftarrow}$: simetrisinin art arda durumlarına bağlı bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

$S_{j_s, art, j_s, j_i \Leftarrow}$: simetrisinin ilk durumuna göre herhangi art arda iki duruma bağlı bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

$S_{j_s, j_i \Leftrightarrow}$: simetrisinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

S_{j_s, j_i}^{DOSD} : simetrisinin ilk ve son durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizimli düzgün olmayan simetrik olasılık

$S_{j_s, j_i \Leftarrow}$: simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

S_{j_s, j_i}^{DOSD} : simetrisinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre bağımlı olasılıklı farklı dizimli düzgün olmayan simetrik olasılık

$S_{j_{ik}, j_i \Leftarrow}$: simetrisinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizimli simetrik bitişik-ayrı olasılığı

S_{j_{ik}, j_i}^{DOSD} : simetrisinin herhangi iki durumuna bağlı bağımlı olasılıklı farklı dizimli düzgün olmayan simetrik olasılık

S_{BB, j_i} : bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımlı durumun simetrisinin son durumuna bağlı simetrik olasılık

$S_{BB, j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin bir bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BB, j_{ik}, j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin iki bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BB, j_s, j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve herhangi bir bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BB, j_s, j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve son bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BB, j_s, j_{ik}, j_i \Leftarrow}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve

herhangi iki bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_s, j_{ik}, j_i} \Leftarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk herhangi bir ve son bağımlı durumuna bağlı simetrik bitişik olasılık

$S_{BBj_s, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin bir bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BBj_{ik}, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin art arda iki bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BBj_s, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve herhangi bir bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BBj_s, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve son bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BBj_{ik}, j_i, 2}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın simetrisinin iki bağımlı durumunun simetrik olasılığı

$S_{BBj_s, j_{ik}, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk ve herhangi iki bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BBj_s, j_{ik}, j_i} \Rightarrow$: bir bağımlı ve bir bağımsız olasılıklı dağılımın bağımlı-bağımsız-bağımlı durumun simetrisinin ilk herhangi

bir ve son bağımlı durumuna bağlı simetrik ayırım olasılığı

$S_{BB(j_{ik})_z, (j_i)_z}$: bir bağımlı ve bir bağımsız olasılıklı dağılımın simetrisinin durumlarının bulunabileceği olaylara göre simetrik olasılık

S^B : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu simetrik bulunmama olasılığı

$S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan simetrik bulunmama olasılığı

$S^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan düzgün simetrik bulunmama olasılığı

$S^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu kalan düzgün olmayan simetrik bulunmama olasılığı

S_0^B : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız simetrik bulunmama olasılığı

$S_0^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan simetrik bulunmama olasılığı

$S_0^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı

$S_0^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı

S_D^B : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumun bağımlı simetrik bulunmama olasılığı

$S_D^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan simetrik bulunmama olasılığı

$S_D^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı

$S_D^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu simetrik bulunmama olasılığı

${}_0S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan simetrik bulunmama olasılığı

${}_0S^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün simetrik bulunmama olasılığı

${}_0S^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S_0^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız simetrik bulunmama olasılığı

${}_0S_0^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan simetrik bulunmama olasılığı

${}_0S_0^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün simetrik bulunmama olasılığı

${}_0S_0^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S_D^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı simetrik bulunmama olasılığı

${}_0S_D^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan simetrik bulunmama olasılığı

${}_0S_D^{DSS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün simetrik bulunmama olasılığı

${}_0S_D^{DOS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu simetrik bulunmama olasılığı

${}_0S^{DS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu kalan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir

bağımlı-bir bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı kalan düzgün olmayan simetrik bulunmama

${}^1S_1^1$: bir olay için bir durumun tek simetrik olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımlı tek simetrik olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bir bağımlı durumun tek simetrik olasılığı

${}^1S_1^{1,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bir bağımlı durumun tek simetrik bulunmama olasılığı

${}^1_{11}S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir dizilimin bağımlı tek simetrik olasılık

${}^1_{D1}S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımlı tek simetrik olasılık

${}^1_{01}S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımsız tek simetrik olasılık

${}^1_{01}S_1^{1,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir olay için bağımsız tek simetrik bulunmama olasılığı

${}_{0,1}{}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir dizilimin bağımsız tek simetrik olasılığı

${}_{0,1t}{}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığı

${}_{0,T}{}^1S_1^1$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımın başladığı duruma göre tek simetrik olasılık

S_T : toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu toplam simetrik olasılık

1S : tek simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu tek simetrik olasılık

${}^1S^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu tek simetrik bulunmama olasılığı

${}_0S^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte simetrik olasılık

${}_0S^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan simetrik olasılık

${}_0S^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün simetrik olasılık

${}_0S^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün olmayan simetrik olasılık

${}_0S_0^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte simetrik olasılık

${}_0S_0^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan simetrik olasılık

${}_0S_0^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün simetrik olasılık

${}_0S_0^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün olmayan simetrik olasılık

${}_0S_D^{BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte simetrik olasılık

${}_0S_D^{DS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan simetrik olasılık

${}_0S_D^{DSS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün simetrik olasılık

${}_0S_D^{DOS,BS}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün olmayan simetrik olasılık

$S_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız toplam simetrik olasılık

$S_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı toplam simetrik olasılık

${}_0S_T$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu toplam simetrik olasılık

${}_0S_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız toplam simetrik olasılık

${}_0S_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı toplam simetrik olasılık

0S_T : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu toplam simetrik olasılık veya bağımlı ve

bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu toplam simetrik olasılık

${}^0S_{0,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız toplam simetrik olasılık eşitliği veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımsız toplam simetrik olasılık

${}^0S_{D,T}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı toplam simetrik olasılık veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı toplam simetrik olasılık

${}_0S^{BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte simetrik bulunmama olasılığı

${}_0S^{DS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan simetrik bulunmama olasılığı

${}_0S^{DSS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün simetrik bulunmama olasılığı

${}_0S^{DOS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S_0^{BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte simetrik bulunmama olasılığı

${}_0S_0^{DS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan simetrik bulunmama olasılığı

${}_0S_0^{DSS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün simetrik bulunmama olasılığı

${}_0S_0^{DOS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

${}_0S_D^{BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte simetrik bulunmama olasılığı

${}_0S_D^{DS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan simetrik bulunmama olasılığı

${}_0S_D^{DSS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün simetrik bulunmama olasılığı

${}_0S_D^{DOS,BS,B}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı birlikte kalan düzgün olmayan simetrik bulunmama olasılığı

S_T^B : bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu toplam simetrik bulunmama olasılığı

$S_{0,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımsız toplam simetrik bulunmama olasılığı

$S_{D,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı durumlu bağımlı toplam simetrik bulunmama olasılığı

${}_0S_T^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu toplam simetrik bulunmama olasılığı

${}_0S_{0,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımsız toplam simetrik bulunmama olasılığı

${}_0S_{D,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımlı durumlu bağımlı toplam simetrik bulunmama olasılığı

${}_0S_T^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli

bağımsız-bağımsız durumlu toplam simetrik bulunmama olasılığı

${}^0S_{0,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımsız toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımsız toplam simetrik bulunmama olasılığı

${}^0S_{D,T}^B$: bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımlı toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımlı toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımlı toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bağımsız durumlu bağımlı toplam simetrik bulunmama olasılığı veya bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımsız-bağımsız durumlu bağımlı toplam simetrik bulunmama olasılığı

BAĞIMLI VE BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMLİ DAĞILIMLAR

D

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Dağılımlar

- **Kalan Düzgün Olmayan Simetri**
- **Bir Bağımlı-Bir Bağımsız Durumlu
Kalan Düzgün Olmayan Simetri**
- **Bağımlı-Bir Bağımsız Durumlu
Kalan Düzgün Olmayan Simetri**

Önceki bölümlerde durum sayısı olay sayısına eşit veya büyük olan bağımlı olasılıklı dağılımların olasılıkları incelendi. Bu bölümde durum sayısı olay sayısından küçük bağımlı olasılık ($D < n$) veya bağımlı ve bir bağımsız durumlu dağılımın olasılıkları incelenecektir. Bağımlı durum sayısı bağımlı olay sayısı eşit, bağımlı durum sayısı bağımlı olay sayısından büyük farklı dizilimli veya farklı dizilimsiz bağımlı durum sayısının bağımlı olay sayısından büyük her bir dağılımına bağımsız olasılıklı seçimle belirlenen bir bağımsız durumun dağılımıyla, bağımlı ve bir bağımsız

olasılıklı dağılımlar elde edilebilir. Bu dağılımlar; bağımlı ve bir bağımsız olasılıklı farklı dizilimli veya bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardır. Durum sayısı olay sayısından küçük olduğunda yapılacak seçimlerde $n - D$ kadar olaya durum belirlenemez. Yapılacak seçimlerde farklı dizilimli ve farklı dizilimsiz dağılımlarda durum belirlenmeyen olayların durumları sıfır (0) ile gösterilebilir. Bir olasılık dağılımında $n - D$ kadar sıfırın veya aynı bağımsız durumun olması, bağımsız olasılıklı seçimlerde, bir dağılımın birden fazla olayında aynı durum belirlenebilmesiyle ilgilidir.

Bu bölümde, yapılacak her bir seçimde bir durumun belirlenebileceği *bağımlı durum sayısı bağımlı olay sayısına eşit* ($D = n$ ve " n : bağımlı olay sayısı") seçimlerle elde edilebilecek, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlar incelenecektir. Bu dağılımlarda bulunabilecek simetrik durumlar, dağılımın başladığı durumlara göre ayrı ayrı incelenecektir. Bağımsız durumla başlayan dağılımlar, bağımsız durumdan/lardan sonraki ilk bağımlı durumuna (olasılık dağılımında soldan sağa ilk bağımlı durum) göre sınıflandırılacaktır. Simetri bağımsız durumla başladığında, aynı yöntemle simetrisinin başladığı bağımlı durum belirlenir.

Olasılık dağılımları; simetrisinin başladığı bağımlı durumla başlayan dağılımlar, simetride bulunmayan bir bağımlı durumla başlayan dağılımlar ve simetride bulunmayan bağımlı durumlarla başlayan dağılımlar olarak sınıflandırılır. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, bağımlı olasılıklı dağılımlarda olduğu gibi simetride

bulunan bağımlı durumlarla başlayan dağılımlardan sadece simetrisinin ilk bağımlı durumuyla başlayan dağılımlarda simetrik durumlar bulunabilir.

Olasılık dağılımları ilk bağımlı durumuna göre sınıflandırılacağından, aynı bağımlı durumla başlayan olasılık dağılımları, iki farklı dağılım türünden oluşabilir. Bu dağılım türleri, bağımsız durumla başlayan dağılımlar ve bağımlı durumla başlayan dağılımlardır. Bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetrisinin ilk bağımlı durumu olan dağılımlar, simetrisinin ilk bağımlı durumuyla başlayan dağılımlar olarak alınır. Eğer bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetride bulunmayan aynı bir bağımlı durum olan dağılımlar, simetride bulunmayan bir bağımlı durumuyla başlayan dağılımlar olarak alınır. Yada bağımsız durumla başlayan dağılımların ilk bağımlı durumu, simetride bulunmayan bağımlı durumlar olan dağılımların tamamı, simetride bulunmayan bağımlı durumlarla başlayan dağılımlar olarak alınır. Bağımlı durumla başlayan dağılımlardan, bu ilk bağımlı durum, simetrisinin ilk bağımlı durumu olan dağılımlar, simetrisinin ilk bağımlı durumuyla başlayan dağılımlara dahil edilir. Eğer olasılık dağılımlarından, ilk bağımlı durumu, simetride bulunmayan aynı bağımlı durum olan dağılımlar, simetride bulunmayan bir bağımlı durumla başlayan dağılımlara dahil edilir. Eğer olasılık dağılımlarından, ilk bağımlı durumu, simetride bulunmayan bağımlı durumlar olan dağılımların tümü, simetride bulunmayan bağımlı durumlarla başlayan dağılımlara dahil edilir. Bu iki dağılım türü ilk bağımlı durumlarına göre aynı bağımlı durumlu dağılımları oluşturur. İki dağılım türü de aynı bağımlı durumla başlayan dağılımlar altında hem birlikte hem de ayrı ayrı incelenecektir.

Simetri, bağımlı ve/veya bağımsız durumlarının bulunabileceği sıralamaya göre sınıflandırılacaktır. Simetri durumlarına göre; bağımlı durumla başlayıp bağımlı durumla biten (bağımlı-bağımlı veya sadece bağımlı durumlu), bağımsız durumla başlayıp bağımlı durumla biten (bağımsız-bağımlı), bir bağımlı durumla başlayıp bir bağımsız durumla biten (bir bağımlı-bir bağımsız), bağımlı durumla başlayıp bir bağımsız durumla biten (bağımlı-bir bağımsız), bir bağımlı durumla başlayıp bağımsız durumla biten (bir bağımlı-bağımsız), bağımlı durumla başlayıp bağımsız durumla biten (bağımlı-bağımsız) ve bağımsız durumla başlayıp bağımlı durumları bulunup bağımsız durumla biten (bağımsız-bağımlı-bağımsız) yedi farklı simetri incelemesi ayrı ayrı yapılacaktır.

Simetri, durumlarının bulunduğu sıralamaya göre sınıflandırılarak, hem olasılık dağılımlarının başladığı durumlara göre hem de bunların bağımsız durumla başlayan dağılımları ve bağımlı durumla başlayan dağılımlarına göre; simetrik, düzgün simetrik ve düzgün olmayan simetrik olasılıklar olarak incelenecektir. Bu simetrik olasılıkların inceleneceği ciltlerde birlikte simetrik olasılık eşitlikleri de verilecektir.

Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardaki, simetrik ve düzgün simetrik olasılık eşitlikleri hem olasılık dağılım tablo değerlerinden hem de teorik yöntemle çıkarılabilecektir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardaki, düzgün olmayan simetrik olasılıklar ise sadece teorik yöntemlerle çıkarılacaktır. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımların inceleneceği ciltlerde, bulunmama olasılıklarının sadece çıkarılabileceği eşitlikler verilecektir.

SİMETRİDE BULUNMAYAN BAĞIMLI DURUMLARLA BAŞLAYAN DAĞILIMLARIN DÜZGÜN OLMAYAN SİMETRİK OLASILIĞI

Simetrik olasılık; düzgün simetrik durumların bulunduğu dağılımlar ile düzgün olmayan simetrik durumların bulunduğu dağılımların toplamı veya düzgün simetrik olasılık ile düzgün olmayan simetrik olasılıkların toplamıdır. Düzgün simetrik olasılık, olasılık dağılımlarında simetrisinin durumları arasında farklı bir durum bulunmayan ve aynı sayıda bağımsız durum bulunan dağılımların sayısına veya simetrisinin durumlarının aynı sıralama sayısında bulunabildiği dağılımların sayısına düzgün simetrik olasılık denir. Simetri, bağımlı ve bağımsız durumlardan oluşabileceğinden, hem simetri hem de düzgün simetrisinin bulunduğu dağılımlarda bağımsız durumun dağılımdaki sırası yerine, simetrideki sayısı dikkate alınır. Olasılık dağılımında simetrisinin durumları arasında, simetride bulunmayan bir durum bulunduğu dağılımlara veya simetrisinin durumlarının aynı sıralama sayısında bulunamadığı dağılımlar, düzgün olmayan simetrisinin bulunduğu dağılımlardır. Bu dağılımların sayısına düzgün olmayan simetrik olasılık denir.

Bu ciltlerde düzgün olmayan simetrik olasılığın eşitlikleri teorik yöntemle çıkarılacaktır. Düzgün olmayan simetrik olasılık eşitlikleri, aynı şartlı simetrik olasılıktan, aynı şartı düzgün simetrik olasılığın farkından teorik yöntemle elde edilebilir. Bu nedenle kalan düzgün olmayan simetrik olasılık eşitlikleri de aynı şartlı kalan simetrik olasılıktan, aynı şartlı kalan düzgün simetrik olasılığın farkından teorik yöntemle elde edilebilir.

Bağımsız olasılıklı durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliği, aynı şartlı kalan düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliğinde n_i üzerinden toplam alımında n yerine $n - 1$ yazılmasıyla da teorik yöntemle elde edilebilecektir.

Bağımlı olasılıklı durumla başlayan dağılımlardan simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki düzgün olmayan simetrik olasılığın eşitliği, aynı şartlı kalan düzgün olmayan simetrik olasılık eşitliğinden, aynı şartlı bağımsız durumlarla başlayan dağılımların kalan düzgün olmayan simetrik olasılık eşitliğinin farkından teorik yöntemle elde edilebileceği gibi aynı şartlı kalan düzgün olmayan simetrik olasılığın sabit değişkenli işlem uzunluklu eşitliğinde n_i üzerinden toplam alımında n_i yerine toplam alınmadan n yazılmasıyla da teorik yöntemle elde edilebilecektir.

Bu ciltte bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlu simetrisinin, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, kalan düzgün olmayan simetrik ve kalan düzgün olmayan simetrik bulunmama olasılıklarının eşitlikleri verilecektir.

BAĞIMSIZ DURUMLA BAŞLAYAN DAĞILIMLARDA BİR BAĞIMLI- BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİ

Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde $\{1, 0\}$, bağımlı ve bir bağımsız olasılıklı farklı dizimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; bağımlı ve bir bağımsız olasılıklı farklı dizimli bir bağımlı-bir bağımsız durumlu bağımsız kalan simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün simetrik olasılığın farkına eşit olur. Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısı için,

$${}^0S_0^{DOS} = {}^0S_0^{DS} - {}^0S_0^{DSS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizimli dağılımlarda, simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde; bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardan, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısına **bağımlı ve bir bağımsız olasılıklı farklı dizimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılık** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılığı ${}^0S_0^{DOS}$ ile gösterilecektir.

$$D = n < n \wedge I = I = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_0^{DOS} = \frac{n! \cdot (D-1)!}{(l-1)!} \cdot \left(\sum_{i=2}^n \mp \frac{1}{i! \cdot (n-i)! \cdot (i+l)} \right) - \frac{(n-2)! \cdot (D-1)}{(l-2)! \cdot D}$$

$$D = n < n \wedge I = I = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_0^{DOS} = \frac{n! \cdot (n-l-1)!}{(l-1)!} \cdot \left(\sum_{i=2}^n \mp \frac{1}{i! \cdot (n-i)! \cdot (i+l)} \right) - \frac{(n-2)! \cdot (n-l-1)}{(l-2)! \cdot (n-l)}$$

$$D = n < n \wedge I = I = 1 \wedge s = 2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-1)! \cdot \sum_{j=2}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j+2}^{n_i-j+1}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = 2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - 1)! \cdot \sum_{j=2}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=\mathbf{n}-j+2}^{n_i-j+1}$$

$$\frac{(n_i - n_s - 1)!}{(j - 2)! \cdot (n_i - n_s - j + 1)!} \cdot \frac{(n_s - 2)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j - 1)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = 2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - 1)! \cdot \sum_{j=2}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j+2}^{n_i-j+1} \sum_{(i=2)}^{(D-j+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j - 2)! \cdot (n_i - n_s - j + 1)!} \cdot \frac{(n_s - i - 1)!}{(n_s + j - D - 2)! \cdot (D - j - i + 1)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = 2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - 1)! \cdot \sum_{j=2}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=\mathbf{n}-j+2}^{n_i-j+1} \sum_{(i=2)}^{(\mathbf{n}-j+1)}$$

$$\frac{(n_i - n_s - 1)!}{(j - 2)! \cdot (n_i - n_s - j + 1)!} \cdot \frac{(n_s - i - 1)!}{(n_s + j - \mathbf{n} - 2)! \cdot (\mathbf{n} - j - i + 1)!}$$

BAĞIMSIZ DURUMLA BAŞLAYAN DAĞILIMLARDA BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİ

Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde $\{1, 2, 3, 4, 5, \mathbf{0}\}$ veya $\{1, 2, \mathbf{0}, \mathbf{0}, \mathbf{0}, 3, 4, \mathbf{0}, \mathbf{0}, 5, \mathbf{0}\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan simetrik olasılıktan, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün simetrik olasılığın farkına eşit olur. Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısı için,

$${}^0S_0^{DOS} = {}^0S_0^{DS} - {}^0S_0^{DSS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde; bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardan, düzgün olmayan simetrik durumların bulunduğu dağılımların sayısına **bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılık** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılık ${}^0S_0^{DOS}$ ile gösterilecektir.

$$D = n < n \wedge s > 1 \wedge I = I = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_0^{DOS} = \frac{(n-1)! \cdot (D+I-s)!}{(t-I-1)!} \cdot \left(\sum_{i=s-I+1}^n \mp \frac{(i+t-I-1)!}{i! \cdot (i+t-1)! \cdot (n-i)!} \right) - \frac{(n-s)! \cdot (D+I-s)}{(t-I-1)! \cdot (D+I-s+1)}$$

$$D = n < n \wedge s > 1 \wedge I = I = 1 \wedge s = s + 1 \vee I = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$s = s + \mathbb{k} + 1 \Rightarrow$$

$${}^0S_0^{DOS} = \frac{(n-1)! \cdot (D-s)!}{(n-D-I-1)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+t-I-1)!}{i! \cdot (i+t-1)! \cdot (n-i)!} \right) -$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{s} > 1 \wedge l = \mathbf{l} = 1 \wedge \mathbf{s} = s + 1 \vee l = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \Rightarrow$$

$${}_0S_0^{DOS} = \frac{(n-1)! \cdot (n+l-l-s)!}{(l-l-1)!} \cdot \left(\sum_{i=s-l+1}^n \mp \frac{(i+l-l-1)!}{i! \cdot (i+l-1)! \cdot (n-i)!} \right) - \frac{(n-s)! \cdot (n+l-l-s)}{(l-l-1)! \cdot (n+l-l-s+1)}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{s} > 1 \wedge l = \mathbf{l} = 1 \wedge \mathbf{s} = s + 1 \vee l = \mathbb{k} + 1 \wedge \mathbb{k} > 0 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \Rightarrow$$

$${}_0S_0^{DOS} = \frac{(n-1)! \cdot (n-l-s)!}{(l-l-1)!} \cdot \left(\sum_{i=s+1}^n \mp \frac{(i+l-l-1)!}{i! \cdot (i+l-1)! \cdot (n-i)!} \right) - \frac{(n-s-l)! \cdot (n-l-s)}{(l-l-1)! \cdot (n-l-s+1)}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{s} > 1 \wedge \mathbb{k} = 0 \wedge l = \mathbf{l} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$${}_0S_0^{DOS} = (D-s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j+2}^{n_i-j} \frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n_i-n_s-1)!}{(j-2)! \cdot (n_i-n_s-j+1)!} \cdot \frac{(n_s-1)!}{(n_s+j-D-1)! \cdot (D-j)!} + \sum_{j=s+2}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j+1} \frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n_i-n_s-1)!}{(j-2)! \cdot (n_i-n_s-j+1)!} \cdot \frac{(n_s-1)!}{(n_s+j-D-1)! \cdot (D-j)!} + (D-s)! \cdot \sum_{(j=s+1)}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j+1} \frac{(n_s-2)!}{(n_s+j-D-1)! \cdot (D-j-1)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{s} > 1 \wedge \mathbb{k} = 0 \wedge l = \mathbf{l} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=\mathbf{n}-j+2}^{n_i-j} \\
&\frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n_i - n_s - 1)!}{(j-2)! \cdot (n_i - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j)!} + \\
&\sum_{j=s+2}^n \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=n_i-j+1} \\
&\frac{(j-2)!}{(j-s-1)! \cdot (s-1)!} \cdot \frac{(n_i - n_s - 1)!}{(j-2)! \cdot (n_i - n_s - j + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j)!} + \\
&(D-s)! \cdot \sum_{(j=s+1)}^n \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=n_i-j+1} \\
&\frac{(n_s - 2)!}{(n_s + j - \mathbf{n} - 1)! \cdot (\mathbf{n} - j - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge s = s + 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_i=s+1}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j_i+2}^{n_i-j_i} \\
&\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot \\
&\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - D - 1)! \cdot (D - j_i)!} + \\
&\sum_{j_i=s+2}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j_i+1} \\
&\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot \\
&\frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - D - 1)! \cdot (D - j_i)!} + \\
&(D-s)! \cdot \sum_{(j_i=s+1)}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j_i+1} \\
&\frac{(n_s - 2)!}{(n_s + j_i - D - 1)! \cdot (D - j_i - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_i=s+1}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=\mathbf{n}-j_i+2}^{n_i-j_i} \\
&\quad \frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot \\
&\quad \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad \sum_{j_i=s+2}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=n_i-j_i+1} \\
&\quad \frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot \\
&\quad \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \sum_{(j_i=s+1)}^{\mathbf{n}} \sum_{(n_i=\mathbf{n}+1)}^{n-1} \sum_{n_s=n_i-j_i+1} \\
&\quad \frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{j_i-s+1} \sum_{(j_i=s+1)}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j_i+2}^{n_i-j_i} \\
&\quad \frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot \\
&\quad \frac{(n_i - n_s - 1)!}{(j_i - 2)! \cdot (n_i - n_s - j_i + 1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - D - 1)! \cdot (D - j_i)!} + \\
&\quad \sum_{j_s=2}^{j_i-s} \sum_{(j_i=s+2)}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j_i+1} \\
&\quad \frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!}
\end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge s > 1 \wedge \mathbb{k} = 0 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{j_i-s+1} \sum_{(j_i=s+1)}^n \sum_{(n_i=n+1)}^{n-1} \sum_{n_s=n-j_i+2}$$

$$\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot$$

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

$$\sum_{j_s=2}^{j_i-s} \sum_{(j_i=s+2)}^n \sum_{(n_i=n+1)}^{n-1} \sum_{n_s=n_i-j_i+1}$$

$$\frac{(j_i - 2)!}{(j_i - s - 1)! \cdot (s - 1)!} \cdot$$

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

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

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

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbf{I} = 1 \wedge \mathbf{s} = s + 1 \wedge \mathbb{k} = 0 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=D-j+2}^{n_i-j} \sum_{i=2}^{D-j+1}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j - D - 2)! \cdot (D - j)!} + \frac{(n_s - i - 1)!}{(n_s + j - D - 2)! \cdot (D - j - i + 1)!} \right) +$$

$$\sum_{j=s+2}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j+1} \sum_{i=2}^{D-j+1}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j - D - 2)! \cdot (D - j)!} + \frac{(n_s - i - 1)!}{(n_s + j - D - 2)! \cdot (D - j - i + 1)!} \right) +$$

$$(D-s)! \cdot \sum_{j=s+1}^D \sum_{(n_i=D+1)}^{n-1} \sum_{n_s=n_i-j+1} \sum_{i=2}^{D-j+1}$$

$$\frac{(n_s - i - 1)!}{(n_s + j - D - 2)! \cdot (D - j - i + 1)!}$$

$$D = n < n \wedge s > 1 \wedge I = I = 1 \wedge s = s + 1 \wedge \mathbb{k} = 0 \Rightarrow$$

$${}^0S_0^{D\theta s} = (D-s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=n+1)}^{n-1} \sum_{n_s=n-j+2}^{n_i-j} \sum_{i=2}^{n-j+1}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j - n - 2)! \cdot (n - j)!} + \frac{(n_s - i - 1)!}{(n_s + j - n - 2)! \cdot (n - j - i + 1)!} \right) +$$

$$\sum_{j=s+2}^n \sum_{(n_i=n+1)}^{n-1} \sum_{n_s=n_i-j+1} \sum_{i=2}^{n-j+1}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j - n - 2)! \cdot (n - j)!} + \frac{(n_s - i - 1)!}{(n_s + j - n - 2)! \cdot (n - j - i + 1)!} \right) +$$

$$(D-s)! \cdot \sum_{j=s+1}^n \sum_{(n_i=n+1)}^{n-1} \sum_{n_s=n_i-j+1} \sum_{i=2}^{n-j+1}$$

$$\frac{(n_s - i - 1)!}{(n_s + j - n - 2)! \cdot (n - j - i + 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
&\quad \frac{(j^{sa} + j_{sa}^{ik} - j_{sa} - 2)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_i=\mathbf{n}+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+j_{sa}-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
&\quad \frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
&\quad \frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} +
\end{aligned}$$

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

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

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

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

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

$$\frac{(n_{sa}+j^{sa}-s-3)!}{(n_{sa}+j^{sa}-n-2)! \cdot (n-s-1)!}$$

$$D = n < n \wedge s > 1 \wedge I = k+1 \wedge s = s+k+1 \wedge k_z: z = 1 \wedge j_{sa} = s \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot$$

$$\sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-s)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-k+1} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j^{sa}+j_{sa}^{ik}-s-2)!}{(j^{sa}-s-1)! \cdot (j_{sa}^{ik}-1)!} \cdot$$

$$\frac{(n_i-n_s-k-1)!}{(j^{sa}-2)! \cdot (n_i-n_s-j^{sa}-k+1)!} \cdot$$

$$\left(\frac{(n_s-2)!}{(n_s+j^{sa}-n-2)! \cdot (n-j^{sa})!} + \frac{(n_s-i-1)!}{(n_s+j^{sa}-n-2)! \cdot (n-j^{sa}-i+1)!} \right) +$$

$$(D-s)! \cdot$$

$$\sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-s-1)} \sum_{n_i=n+k+1}^{n-1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j_{ik}-2)!}{(j_{ik}-j_{sa}^{ik}-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+s-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=)}^{()}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot$$

$$\sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!} \cdot$$

$$\frac{(n_i - n_s - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - \mathbb{k} + 1)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) +$$

$$(D - s)! \cdot$$

$$\sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)}^{(j^{sa}-2)} \sum_{n_i=\mathbf{n}+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j_{ik} - 2)!}{(j_{ik} - s)! \cdot (s - 2)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - n - 2)! \cdot (n - s - 1)!}$$

$$D = n < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\ &\frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+j_{sa}-1)} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\ &\frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - n - 2)! \cdot (n - s - 1)!} \end{aligned}$$

$$D = n < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\ &\frac{(j^{sa} - 3)!}{(j^{sa} - j_{sa} - 1)! \cdot (j_{sa} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \end{aligned}$$

$$\begin{aligned}
& \frac{(n_i - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_{sa} - j^{sa} - \mathbb{k} + 1)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
& (D - s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}-2)}^{(j^{sa}-2)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa})! \cdot (j_{sa} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
& (D - s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)}^{(n-1)} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
& \frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - n - 2)! \cdot (n - s - 1)!}
\end{aligned}$$

$$D = n < n \wedge s > 1 \wedge l = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{sa} = s \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!} \cdot \\
& \frac{(n_i - n_s - \mathbb{k} - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - \mathbb{k} + 1)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa} - i + 1)!} \right) + \\
& (D - s)! \cdot \\
& \sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-s-1)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+s-1)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-k+1} \sum_{(i=)}^{(n-1)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - n - 2)! \cdot (n - s - 1)!}$$

$$D = n < n \wedge s > 1 \wedge I = k + 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-k+1} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!} \cdot \frac{(n_i - n_s - k - 1)!}{(j^{sa} - 2)! \cdot (n_i - n_s - j^{sa} - k + 1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa} - i + 1)!} \right) +$$

$$(D - s)! \cdot \sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)}^{(j^{sa}-2)} \sum_{n_i=n+k+1}^{n-1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \sum_{(i=2)}^{(n-j^{sa}+1)}$$

$$\frac{(j_{ik} - 2)!}{(j_{ik} - s)! \cdot (s - 2)!} \cdot \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa} - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-k+1} \sum_{(i=)}$$

$$\frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot$$

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

$$\begin{aligned} & \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ & \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ & \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ & \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\ & \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} - \end{aligned}$$

$$\begin{aligned} & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j^{sa}=j_s+j_{sa}-1)} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\ & \frac{(n_{sa} + j^{sa} - s - 3)!}{(n_{sa} + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!} \end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
&\quad \frac{(j^{sa}-3)!}{(j^{sa}-j_{sa}-1)! \cdot (j_{sa}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j^{sa}=j_{sa}+2}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-2)}^{(j^{sa}-2)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik}-2)!}{(j_{ik}-j_{sa})! \cdot (j_{sa}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j^{sa}=j_{sa}+1}^{n+j_{sa}-s} \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \\
&\quad \frac{(n_{sa}+j^{sa}-s-3)!}{(n_{sa}+j^{sa}-n-2)! \cdot (n-s-1)!}
\end{aligned}$$

$$D = n < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{sa} = s \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \\
&\quad \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-s)} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
&\quad \frac{(j^{sa}+j_{sa}^{ik}-s-2)!}{(j^{sa}-s-1)! \cdot (j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j^{sa}-\mathbb{k})!}
\end{aligned}$$

$$\begin{aligned}
& \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) + \\
& \hspace{20em} (D - s)! \cdot \\
& \sum_{j^{sa}=s+2}^{\mathbf{n}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-s-1)} \sum_{n_i=\mathbf{n}+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \frac{(j_{ik} - 2)!}{(j_{ik} - j_{sa}^{ik} - 1)! \cdot (j_{sa}^{ik} - 1)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) - \\
& \hspace{10em} (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j^{sa}=j_s+s-1)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_i-j^{sa}-\mathbb{k}+1} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \hspace{20em} \frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - s - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge j_{sa} = s \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
& \hspace{20em} {}^0S_0^{DOS} = (D - s)! \cdot \\
& \sum_{j^{sa}=s+1}^{\mathbf{n}} \sum_{(j_{ik}=j^{sa}-1)} \sum_{n_i=\mathbf{n}+\mathbb{k}+1}^{n-1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \hspace{20em} \frac{(j^{sa} - 3)!}{(j^{sa} - s - 1)! \cdot (s - 2)!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa} - \mathbb{k})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - \mathbf{n} - 2)! \cdot (\mathbf{n} - j^{sa} - i + 1)!} \right) + \\
& \hspace{20em} (D - s)! \cdot
\end{aligned}$$

$$\begin{aligned}
& \sum_{j^{sa}=s+2}^n \sum_{(j_{ik}=s)}^{(j^{sa}-2)} \sum_{n_i=n+l_k+1}^{n-1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_i-j_{ik}+1)} \sum_{n_s=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-l_k} \sum_{(i=2)}^{(n-j^{sa}+1)} \\
& \frac{(j_{ik}-2)!}{(j_{ik}-s)! \cdot (s-2)!} \cdot \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j^{sa})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa})!} + \frac{(n_s - i - 1)!}{(n_s + j^{sa} - n - 2)! \cdot (n - j^{sa} - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j^{sa}=s+1}^n \sum_{(j_{ik}=j^{sa}-1)} \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_s=n-j^{sa}+2}^{n_i-j^{sa}-l_k+1} \sum_{(i=)} \\
& \frac{(n_s + j^{sa} - s - 3)!}{(n_s + j^{sa} - n - 2)! \cdot (n - s - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}
\end{aligned}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k}^{(\quad)} \left(\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \right)_{j^{sa}}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\quad)} \\ &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\quad \frac{(n_{ik} - n_{sa} - k - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}^{()}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik})}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}}^{()}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{()}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(n+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!}$$

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

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_Z : Z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{()} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\cdot)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(n+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-\mathbb{k}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} +
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(\mathbf{n}+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\)}$$

$$\begin{aligned}
& \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbf{k}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k})} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbf{k}} \\
& \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(\mathbf{n}+j_{s_a}^{i_k}-j_{i_k}-j_{s_a})!}{(\mathbf{n}+j_{s_a}^{i_k}-j_{i_k}-s)! \cdot (s-j_{s_a})!} \cdot \\
& \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}+j_s-n_{i_k}-j_{i_k})!} \cdot \\
& \frac{(n_{i_k}-n_{s_a}-\mathbf{k}-1)!}{(j^{s_a}-j_{i_k}-1)! \cdot (n_{i_k}+j_{i_k}-n_{s_a}-j^{s_a}-\mathbf{k})!} \cdot \frac{(n_{s_a}-1)!}{(n_{s_a}+j^{s_a}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{s_a})!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(n+j_{s_a}^{i_k}-s)} \sum_{j^{s_a}=j_{i_k}+j_{s_a}-j_{s_a}^{i_k}+1}^{n+j_{s_a}-s} \\
& \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbf{k}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k})} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbf{k}} \\
& \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(j^{s_a}-j_{i_k}-1)!}{(j^{s_a}+j_{s_a}^{i_k}-j_{i_k}-j_{s_a})! \cdot (j_{s_a}-j_{s_a}^{i_k}-1)!} \cdot \\
& \frac{(n-j^{s_a})!}{(\mathbf{n}+j_{s_a}-j^{s_a}-s)! \cdot (s-j_{s_a})!} \cdot \\
& \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}+j_s-n_{i_k}-j_{i_k})!} \cdot \\
& \frac{(n_{i_k}-n_{s_a}-1)!}{(j^{s_a}-j_{i_k}-1)! \cdot (n_{i_k}+j_{i_k}-n_{s_a}-j^{s_a})!} \cdot \frac{(n_{s_a}-1)!}{(n_{s_a}+j^{s_a}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{s_a})!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\quad)} \sum_{j^{s_a}=j_s+j_{s_a}-1}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k})}^{(\quad)} \sum_{n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbf{k}}^{(\quad)} \\
& \frac{(n_i+j_{i_k}+j_{s_a}^s-j_s-j_{s_a}^{i_k}-s-1)!}{(n_i-\mathbf{n}-1)! \cdot (\mathbf{n}+j_{i_k}+j_{s_a}^s-j_s-j_{s_a}^{i_k}-s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge \mathbf{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-l_k} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(n+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \frac{(n_{ik}-n_{sa}-l_k-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-l_k)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-l_k} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(\quad)} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_k}^{(\quad)} \\
&\quad \frac{(n_i+2 \cdot j_{ik}+j_{sa}^s+j_{sa}-j_s-j^{sa}-2 \cdot j_{sa}^{ik}-s-I)!}{(n_i-n-I)! \cdot (n+2 \cdot j_{ik}+j_{sa}^s+j_{sa}-j_s-j^{sa}-2 \cdot j_{sa}^{ik}-s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

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{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\
&\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}
\end{aligned}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \frac{(n_i + j_{ik} + j_{sa} - j^{sa} - s - I - j_{sa}^{ik})!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa} - j^{sa} - s - j_{sa}^{ik})!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}-k}^{()}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_{sa}=j_{ik}+1}^{()}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}-k-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}$$

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

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

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{sa})!}{(n + j_{sa} - j_{sa} - s)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_k}$$

$$\left(\frac{(n_i - s - l)!}{(n_i - n - l)! \cdot (n - s)!} \right)_{j^{sa}}$$

$$D = n < n \wedge l_k = 0 \wedge l = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge l = 1 \wedge s = s + l_k + 1 \wedge l_{k_z} : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{D\theta s} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-l_k-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-l_k}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{\mathbf{n}+j_{sa}-s}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_Z : Z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\cdot)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa} + j_{sa}^{ik} - 2 \cdot j^{sa} - s - 2 \cdot j_{sa}^s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k}^{()}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(n_i + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j^{sa} + j_{sa}^s + j_{sa}^{ik} - j_s - 2 \cdot j_{sa} - s + 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j_{ik} - 1)!}{(\mathbf{n} + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{()} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{ik}-1)!}{(n+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} +$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s+1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{ik}-1)!}{(n+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\quad)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!}
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}
\end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+\mathbb{k}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+1} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ &\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \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_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\ &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1} \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

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$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\cdot)} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{ik}-1)!}{(n+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \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})!}
\end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{(\quad)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{D0s} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

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{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}
\end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - k - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

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{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{j_{sa}^{ik}}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}-\mathbb{k}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(\mathbf{n} + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{j_{sa}^{ik}}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!}
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - n - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n + j_{sa}^{ik} - j_{ik} - j_{sa})!}{(n + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa})!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n+j_{sa}^{ik}-j_{ik}-j_{sa})!}{(n+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-l_k-1} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{ik}-1)!}{(n+j_{sa}-j_{ik}-s-1)! \cdot (s-j_{sa})!} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
&\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-l_k} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \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_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+1} \\
&\quad \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-l_k} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \\
&\quad \frac{(2 \cdot n_{is} + j_s - n_{sa} - j_{ik} - s - 2 \cdot l_k - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{sa} - j_{ik} - n - 2 \cdot l_k - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge \mathbf{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbf{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \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_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbf{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbf{k}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \end{aligned}$$

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 2 \cdot \mathbb{k})!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j_s+2}^{n_{ik}-\mathbb{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=n-j_s+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \end{aligned}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{\mathbf{n}+j_{sa}-s} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \\ &(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \end{aligned}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{(\)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(2 \cdot n_{ik} + j_{ik} - n_{sa} - j_s - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j_{ik} - 1)!}{(n + j_{sa} - j_{ik} - s - 1)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \vee$$

$$l = k + 1 \wedge s > 1 \wedge k > 0 \wedge l = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$l = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge l = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ \left. \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \right)$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{\binom{n+j_{sa}^{ik}-s}{j_{ik}=j_s+j_{sa}^{ik}}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
& \sum_{\binom{n-1}{n_i=\mathbf{n}+\mathbb{k}+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{n_{is}+j_s-j_{ik}-\mathbb{k}_1}{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=\mathbf{n}-j^{sa}+2}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{\binom{n-1}{n_i=\mathbf{n}+\mathbb{k}+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{()}{n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\binom{()}{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}} \\
& \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j^{sa}}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
&\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{(j_{ik}=j_s+j_{sa}^{ik}-1)}} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{\binom{(n-1)}{(n_i=\mathbf{n}+\mathbb{k}+1)}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}} \sum_{\binom{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}{n_{sa}=\mathbf{n}-j^{sa}+2}} \\
& \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (n - j^{sa})!} +
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(\mathbf{n} - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2}
\end{aligned}$$

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
&\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
&\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j^{sa}-j_{ik}-1)!}{(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot
\end{aligned}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \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 \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \right. \\ &\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right) \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}_0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}
\end{aligned}$$

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \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 \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \right. \\ &\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=n-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j^{s_a} - j_{i_k} - 1)!}{(j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})! \cdot (j_{s_a} - j_{s_a}^{i_k} - 1)!} \cdot \\
& \frac{(n - j^{s_a})!}{(n + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - n - 1)! \cdot (n - j^{s_a})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{()} \sum_{j^{s_a}=j_s+j_{s_a}-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{()} \sum_{n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2}^{()} \\
& \frac{(n_i + j_s + j_{s_a}^{i_k} - j_{i_k} - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{s_a}^s - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + j_s + j_{s_a}^{i_k} - j_{i_k} - s - j_{s_a}^s)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{()} \sum_{j^{s_a}=j_s+j_{s_a}-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=n-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(n - j_s - j_{s_a} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{s_a})!} \cdot \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - \mathbb{k}_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - \mathbb{k}_1)!}
\end{aligned}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\left. \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \right) \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(\)}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j_{ik} + j_{sa}^s + j_{sa} - j_s - j^{sa} - 2 \cdot j_{sa}^{ik} - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_{ik} + j_{sa}^s + j_{sa} - j_s - j^{sa} - 2 \cdot j_{sa}^{ik} - s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{D0S} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\quad \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 \\ &\quad \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\ &\quad \left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \right. \\ &\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j^{s_a} - j_{i_k} - 1)!}{(j^{s_a} + j_{s_a}^{i_k} - j_{i_k} - j_{s_a})! \cdot (j_{s_a} - j_{s_a}^{i_k} - 1)!} \cdot \\
& \frac{(n - j^{s_a})!}{(n + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - \mathbf{n} - 1)! \cdot (n - j^{s_a})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j^{s_a}=j_s+j_{s_a}-1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_{s_a}=\mathbf{n}_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2}^{(\)} \\
& \frac{(n_i + j_{i_k} + j_{s_a} - j^{s_a} - s - I - j_{s_a}^{i_k})!}{(n_i - \mathbf{n} - I)! \cdot (n + j_{i_k} + j_{s_a} - j^{s_a} - s - j_{s_a}^{i_k})!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j^{s_a}=j_s+j_{s_a}-1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(n - j_s - j_{s_a} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{s_a})!} \cdot \\
& \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} - \mathbb{k}_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - \mathbb{k}_1)!}
\end{aligned}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{i_k} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{i_k} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\left. \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{ik})!} \right) \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\quad)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+2}^{\mathbf{n}+j_{sa}-s} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2} \left(\frac{(n_i - s - k_1 - k_2 - 1)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - s)!} \right)_{j^{sa}}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \\
&\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!}
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=n-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(n-j^{s_a})!}{(n+j_{s_a}-j^{s_a}-s)! \cdot (s-j_{s_a})!} \cdot \\
& \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}+j_s-n_{i_k}-j_{i_k})!} \cdot \\
& \frac{(n_{i_k}-n_{s_a}-1)!}{(j^{s_a}-j_{i_k}-1)! \cdot (n_{i_k}+j_{i_k}-n_{s_a}-j^{s_a})!} \cdot \frac{(n_{s_a}-1)!}{(n_{s_a}+j^{s_a}-n-1)! \cdot (n-j^{s_a})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k})}^{(n+j_{s_a}^{i_k}-s)} \sum_{j^{s_a}=j_{i_k}+1}^{n+j_{s_a}-s} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=n-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(n-j^{s_a})!}{(n+j_{s_a}-j^{s_a}-s)! \cdot (s-j_{s_a})!} \cdot \\
& \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}+j_s-n_{i_k}-j_{i_k})!} \cdot \\
& \frac{(n_{i_k}-n_{s_a}-1)!}{(j^{s_a}-j_{i_k}-1)! \cdot (n_{i_k}+j_{i_k}-n_{s_a}-j^{s_a})!} \cdot \frac{(n_{s_a}-1)!}{(n_{s_a}+j^{s_a}-n-1)! \cdot (n-j^{s_a})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j^{s_a}=j_{i_k}+1}^{(\)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2}^{(\)} \\
& \frac{(n_i+j_s+j_{s_a}-j_{i_k}-s-I-j_{s_a}^s-1)!}{(n_i-n-I)! \cdot (n+j_s+j_{s_a}-j_{i_k}-s-j_{s_a}^s-1)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

$$\begin{aligned}
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = \mathbf{n} + \mathbb{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)} \sum_{n_{s_a} = \mathbf{n} - j^{s_a} + 2}^{n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(\mathbf{n} - j^{s_a})!}{(\mathbf{n} + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{s_a})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k})}^{(n + j_{s_a}^{i_k} - s)} \sum_{j^{s_a} = j_{i_k} + 1}^{n + j_{s_a} - s} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = \mathbf{n} + \mathbb{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)} \sum_{n_{s_a} = \mathbf{n} - j^{s_a} + 2}^{n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(\mathbf{n} - j^{s_a})!}{(\mathbf{n} + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{s_a})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{(\)} \sum_{j^{s_a} = j_{i_k} + 1}^{(\)} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)}^{(\)} \sum_{n_{s_a} = n_{i_k} + j_{i_k} - j^{s_a} - \mathbb{k}_2}^{(\)} \\
& \frac{(n_i + 2 \cdot j_s + j_{s_a} + j_{s_a}^{i_k} - 2 \cdot j^{s_a} - s - I - 2 \cdot j_{s_a}^s + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{s_a} + j_{s_a}^{i_k} - 2 \cdot j^{s_a} - s - 2 \cdot j_{s_a}^s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{\binom{(n-1)}{n_i=\mathbf{n}+\mathbb{k}+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{()}{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}} \sum_{\binom{()}{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{\binom{(n-1)}{n_i=\mathbf{n}+\mathbb{k}+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}{n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2}} \sum_{\binom{n_{ik}-\mathbb{k}_2-1}{n_{sa}=\mathbf{n}-j^{sa}+2}}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
 &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

$$\begin{aligned}
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(n - j^{s_a})!}{(n + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - \mathbf{n} - 1)! \cdot (n - j^{s_a})!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k})}^{(n+j_{s_a}^{i_k}-s)} \sum_{j^{s_a}=j_{i_k}+1}^{n+j_{s_a}-s} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_{s_a}=\mathbf{n}-j^{s_a}+2}^{n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(n - j^{s_a})!}{(n + j_{s_a} - j^{s_a} - s)! \cdot (s - j_{s_a})!} \cdot \\
& \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_{s_a} - 1)!}{(j^{s_a} - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_{s_a} - j^{s_a})!} \cdot \frac{(n_{s_a} - 1)!}{(n_{s_a} + j^{s_a} - \mathbf{n} - 1)! \cdot (n - j^{s_a})!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j^{s_a}=j_{i_k}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_{s_a}=n_{i_k}+j_{i_k}-j^{s_a}-\mathbb{k}_2}^{(\)} \\
& \frac{(n_i + j_{s_a} - s - I - j_{s_a}^{i_k} - 1)!}{(n_i - \mathbf{n} - I)! \cdot (n + j_{s_a} - s - j_{s_a}^{i_k} - 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{i_k} = j^{s_a} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
 &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!}
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{D0S} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$\frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} j^{sa=j_{ik}+1}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s+1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k+1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s+k+1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k+1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s+k+1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right.$$

$$\left. \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_{sa}=j_s+j_{sa}-1}^{()} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
&\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
&\frac{(n_{ik}-n_{sa}-k_2-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa}-k_2)!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_{sa}-j_{ik}-1)!}{(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot \\
&\frac{(n-j_{sa})!}{(n+j_{sa}-j_{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_{sa}-j_{ik}-1)!}{(j_{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})! \cdot (j_{sa}-j_{sa}^{ik}-1)!} \cdot
\end{aligned}$$

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_{sa} - k_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - k_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} +$$

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

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

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} j^{sa=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right)$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \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})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right.$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{D0S} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}^{()} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1} \\
& \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!}
\end{aligned}$$

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

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

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} j^{sa}=j_s+j_{sa}-1 \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1 \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}^{(\)}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 3 \cdot k_1 - 2 \cdot k_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - n - 3 \cdot k_1 - 2 \cdot k_2 - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n+j_{sa}-s} \right)$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - j_{ik} - j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j_{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right)$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\mathbf{n}+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j^{sa} - j_{ik} - 1)!}{(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})! \cdot (j_{sa} - j_{sa}^{ik} - 1)!} \\ &\frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \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})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\frac{\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}}{(n - j_s - j_{sa} + 1)!}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right.$$

$$\left. \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-k_2} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = \mathbf{s} + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - n - 1)! \cdot (n - j^{sa})!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(n + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} \Bigg) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} j^{sa=j_s+j_{sa}-1} \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\quad \frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ &\quad \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\ &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\quad \left. \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \right. \\ &\quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \right) \end{aligned}$$

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

$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}^{()}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 3 \cdot k_1 - 2 \cdot k_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - n - 3 \cdot k_1 - 2 \cdot k_2 - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}^{()}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}^{s-1}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(\mathbf{n} - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \end{aligned}$$

$$\begin{aligned}
& \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{\mathbf{n}+j_{sa}-s} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(\mathbf{n}-j^{sa})!}{(\mathbf{n}+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\mathbf{n}-1)! \cdot (\mathbf{n}-j^{sa})!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_{ik}+1} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j^{sa} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j^{sa}=j_s+j_{sa}-1} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{i_s}+j_s-j_{ik}-\mathbb{k}_1)}^{(\quad)} \sum_{n_{sa}=\mathbf{n}_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}.$$

$$\frac{(3 \cdot n_{i_s} + 2 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 2)!}{(3 \cdot n_{i_s} + 3 \cdot j_s - n_{ik} - n_{sa} - 2 \cdot j_{ik} - \mathbf{n} - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n - j_s - j_{sa} + 1)!}{(n - j_s - s + 1)! \cdot (s - j_{sa})!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \mathbf{n} - 1)! \cdot (\mathbf{n} - j^{sa})!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=\mathbf{n}-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n - j^{sa})!}{(\mathbf{n} + j_{sa} - j^{sa} - s)! \cdot (s - j_{sa})!} \right) \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_{sa}=j_s+j_{sa}-1} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}-k_2-1} \\
&\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \\
&\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{sa})!}{(n+j_{sa}-j_{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j_{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-n-1)! \cdot (n-j_{sa})!} + \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_{sa}=j_{ik}+1}^{n+j_{sa}-s} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j_{sa}+2}^{n_{ik}+j_{ik}-j_{sa}-k_2} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j_{sa})!}{(n+j_{sa}-j_{sa}-s)! \cdot (s-j_{sa})!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-k_2}$$

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-k_2-1}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j^{sa} - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_s+j_{sa}-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n-j_s-j_{sa}+1)!}{(n-j_s-s+1)! \cdot (s-j_{sa})!} \cdot \\ &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\ &\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\ &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+2}^{n+j_{sa}-s} \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\ &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(n-j^{sa})!}{(n+j_{sa}-j^{sa}-s)! \cdot (s-j_{sa})!} \cdot \\ &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\ &\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-n-1)! \cdot (n-j^{sa})!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j^{sa}=j_{ik}+1}^{n+j_{sa}-s} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{sa}=n-j^{sa}+2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \end{aligned}$$

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

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j^{sa}=j_{ik}+1}$$

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

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

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

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

$$D = n < n \wedge l_k = 0 \wedge l = 1 \wedge s = s + 1 \vee$$

$$l = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge l = 1 \wedge s = s + l_k + 1 \wedge l_{k_z}: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(n+j_{s_a}^{i_k}-s)} \sum_{j_i=j_{i_k}+s-j_{s_a}^{i_k}} \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+l_k-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k})} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-l_k} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - l_k - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i - l_k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +
 \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_i-k} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-k-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} +
\end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_i-k} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-k-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} +
\end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_i-k} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{j_{sa}^{ik}} \\
 & \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}
 \end{aligned}$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\quad)} \\
& \frac{(n_i + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

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 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
 & \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\)}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

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{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \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)!} - \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(n_i+j_{ik}-j_i-I-j_{sa}^{ik})!}{(n_i-\mathbf{n}-I)! \cdot (\mathbf{n}+j_{ik}-j_i-j_{sa}^{ik})!}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

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{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
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&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=\mathbf{n}_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\)} \\
&\quad \left(\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s)!} \right)_{j_i}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge \mathbf{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

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&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\
&\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}} \\
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&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_s^{\mathbf{k}}-1)}^{(\quad)} \sum_{j_i=j_{ik}+1} \\
&\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=\mathbf{n}_{ik}+j_{ik}-j_i-\mathbf{k}} \\
&\frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}
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&\quad \frac{(n_i + j_s - j_{ik} - I - j_{sa}^s - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_s - j_{ik} - j_{sa}^s - 1)!}
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$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

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$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbf{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\ &\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)!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbf{k}}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbf{k}} \\ &\frac{(n_i + j_i + j_{sa}^s - j_s - j_{sa}^{\mathbf{k}} - s - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s - j_s - j_{sa}^{\mathbf{k}} - s - 1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
&\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)!} \\
&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k} \\ &\frac{(n_i - I - j_{sa}^{ik} - 1)!}{(n_i - n - I)! \cdot (n - j_{sa}^{ik} - 1)!} \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
&\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
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&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{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)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\
&(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\frac{(n_i + j_{sa}^{\mathbb{k}} - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{sa}^{\mathbb{k}} - 2 \cdot s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge \mathbf{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-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})!} \\
&\quad \frac{(n_{ik}-n_s-\mathbf{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbf{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \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_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)!} \\
&\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbf{k}} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!}
\end{aligned}$$

$$\frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - s - \mathbb{k} - 1)!}{(n_{is} + j_s - \mathbf{n} - \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1} \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{(n + j_{sa}^{ik} - s)} \sum_{j_i = j_{ik} + s - j_{sa}^{ik}} \frac{\sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{(n + j_{sa}^{ik} - s)} \sum_{j_i = j_{ik} + s - j_{sa}^{ik} + 1}^n \frac{\sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!}$$

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

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_k}$$

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

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

$$D = n < n \wedge l_k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge l_{k_z}; z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_k}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

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

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_k}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

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

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

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

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

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

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

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

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

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

$$\begin{aligned}
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \cdot \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{()} \sum_{j_i = j_{ik} + 1}^{()} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = n_{is} + j_s - j_{ik})}^{()} \sum_{n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}}^{()} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(n_{ik} + j_{sa}^{ik} - s - \mathbb{k} - j_{sa}^s - 1)!}{(n_{ik} + j_i - \mathbf{n} - \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_i + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + s - 2)}^{(n-1)} \sum_{j_i = j_{ik} + 1}^{()} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} - \mathbb{k} - 1} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +
\end{aligned}$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\cdot)} \sum_{j_i=j_{ik}+1}^{(\cdot)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\cdot)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\cdot)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_i - s - \mathbb{k})!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_i - n - \mathbb{k} - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(n+j_{sa}^{\mathbb{k}}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{\mathbb{k}}}^{(\cdot)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{\mathbb{k}}+1)! \cdot (j_{sa}^{\mathbb{k}}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}
\end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_Z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{j_{sa}^{ik}}$$

$$\begin{aligned}
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} + \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\quad)} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} + \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-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 \\
&\quad \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)!} \\
&\quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
&\quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
&\quad \frac{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \frac{(n_{ik} - n_s - k - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\
 &\quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1} \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}
 \end{aligned}$$

$$\frac{(n_{is} + n_{ik} + j_{ik} - n_s - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(n_{is} + n_{ik} + j_s + j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} - \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s + j_{ik} - j_s - s)!}{(n_s + j_{ik} - n - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \end{aligned}$$

$$\sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = n_{is} + j_s - j_{ik})}^{()} \sum_{n_s = n_{ik} + j_{ik} - j_i - \mathbb{k}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - j_{sa}^s - 1)!}{(n_s + j_{ik} - \mathbf{n} - j_{sa}^s)! \cdot (\mathbf{n} - j_{ik} - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + s - 2)}^{(n-1)} \sum_{j_i = j_{ik} + 1}$$

$$\sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} - \mathbb{k} - 1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k} - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik})} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

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

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

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$$(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot lk)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - n - 2 \cdot lk - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

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$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-lk-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

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

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot lk - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - n - 2 \cdot lk - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge lk_z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-lk-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

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

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{()}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{()}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik})}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}-1}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k})} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}}$$

$$\frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{()} \sum_{j_i=j_{i_k}+1}^{()}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k})}^{()} \sum_{n_s=n_{i_k}+j_{i_k}-j_i-\mathbb{k}}$$

$$\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} + n_{i_k} - n_s - s - 2 \cdot \mathbb{k} - 2)!}{(n_{i_s} + n_{i_k} + j_s - n_s - n - 2 \cdot \mathbb{k} - j_{s_a}^s - 2)! \cdot (n + j_{s_a}^s - s - j_s)!}$$

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(n+j_{s_a}^{i_k}-s)} \sum_{j_i=j_{i_k}+s-j_{s_a}^{i_k}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k})} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{j_{ik}} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_s-k-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k)!} \cdot \\
&\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
&(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
&\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
&\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
&\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
&(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
&\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{(\quad)}
\end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - k - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \end{aligned}$$

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - I - 2 \cdot j_{sa}^s)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_s + j_{sa}^{ik} - j_{ik} - j_i - 2 \cdot j_{sa}^s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{()} \\
& \frac{(n_i+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s-I)!}{(n_i-n-I)! \cdot (n+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k})!}
\end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\)} \\
 & \quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z; z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_{ik}-n_s-k-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k)!} \\
 &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{(\quad)}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_i - 2 \cdot j_{sa}^{ik} - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + 2 \cdot j_{ik} + j_{sa}^s - j_s - j_i - 2 \cdot j_{sa}^{ik})!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-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} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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 \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - k - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_s^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{()} \left(\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \right)_{j_i}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s=n+\mathbb{k}-j_s+2}}^{n_i-j_s+1} \sum_{(n_{i_k=n+\mathbb{k}-j_{i_k}+2})}^{(n_{i_s+j_s-j_{i_k}})} \sum_{n_s=n-j_i+2}^{n_{i_k+j_{i_k}-j_i-\mathbb{k}}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{i_k}^{i_k}-1)}^{()} \sum_{j_i=j_{i_k}+1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s=n+\mathbb{k}-j_s+2}}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s+j_s-j_{i_k}})}^{()} \sum_{n_s=n_{i_k}+j_{i_k}-j_i-\mathbb{k}} \\
& \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s - 1)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{i_k} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{i_k}+1} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s=n+\mathbb{k}-j_s+2}}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}-j_{i_k}+2)}^{(n_{i_s+j_s-j_{i_k}})} \sum_{n_s=n-j_i+2}^{n_{i_k}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +
\end{aligned}$$

$$\begin{aligned}
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{()} \\
 & \frac{(n_i+j_s-j_{ik}-I-j_{sa}^s-1)!}{(n_i-n-I)! \cdot (n+j_s-j_{ik}-j_{sa}^s-1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!}
 \end{aligned}$$

$$\begin{aligned}
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
& \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
& \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
& \quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k} \\
& \quad \frac{(n_i + 2 \cdot j_s + j_{sa}^{lk} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - n - I)! \cdot (n + 2 \cdot j_s + j_{sa}^{lk} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot s - I + 1)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0D_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\)} \\
& \frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\begin{aligned}
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \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 \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \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 \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}^{(\)} \\
 & \frac{(n_i+j_s+j_{sa}^{ik}-j_{ik}-s-I-j_{sa}^s)!}{(n_i-n-I)! \cdot (n+j_s+j_{sa}^{ik}-j_{ik}-s-j_{sa}^s)!}
 \end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z = z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\
 &\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-l_k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 &\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 &\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_k}^{()} \\
 &\frac{(n_i + j_i + j_{sa}^s - j_s - j_{sa}^{lk} - s - I - 1)!}{(n_i - n - I)! \cdot (n + j_i + j_{sa}^s - j_s - j_{sa}^{lk} - s - 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}
 \end{aligned}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - n - I)! \cdot (n + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}
 \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \end{aligned}$$

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

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

$$\frac{(n_i + j_{sa}^{ik} - 2 \cdot s - I + 1)!}{(n_i - n - I)! \cdot (n + j_{sa}^{ik} - 2 \cdot s + 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\begin{aligned}
 & \sum_{(n_i = n + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + \mathbb{k} - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k})} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{()} \sum_{j_i = j_{i_k} + 1}^{()} \\
 & \sum_{(n_i = n + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k})}^{()} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - \mathbb{k}} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \\
 & \frac{(n_{i_s} - s - \mathbb{k} - 1)!}{(n_{i_s} + j_s - n - \mathbb{k} - j_{s_a}^s - 1)! \cdot (n + j_{s_a}^s - s - j_s)!}
 \end{aligned}$$

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{(n + j_{s_a}^{i_k} - s)} \sum_{j_i = j_{i_k} + s - j_{s_a}^{i_k}} \\
 & \sum_{(n_i = n + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k} - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + \mathbb{k} - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k})} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!}
 \end{aligned}$$

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\)}$$

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

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 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})!} \\ &\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 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)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \end{aligned}$$

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

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{()} \\ \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0\sigma_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{()} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_i - s - k)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_i - n - k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!}
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_{ik}-n_s-k-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k)!} \\
 &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \\
 &\frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 &\frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\
 &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - 1 - j_{sa}^s)!}{(n_s + j_i - \mathbf{n} - j_{sa}^s - 1)! \cdot (\mathbf{n} - j_i)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - \mathbb{k} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k})!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(n)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot$$

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

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{(\)} \\
 & \quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s\alpha}^{\mathbb{k}}-1)}^{(\quad)} \sum_{j_i=j_{ik}+1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s + j_{ik} - j_s - s)!}{(n_s + j_{ik} - n - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \end{aligned}$$

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

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge lk_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \\ \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-lk-1} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\ \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot k)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - n - 2 \cdot k - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k}^{()} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot k - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - n - 2 \cdot k - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-k-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot
\end{aligned}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{(n-1)}$$

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \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 \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(n-1)} \sum_{j_i=j_{ik}+2}^n \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \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 \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik})}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{is}+n_{ik}-n_s-s-2 \cdot \mathbb{k}-2)!}{(n_{is}+n_{ik}+j_s-n_s-n-2 \cdot \mathbb{k}-j_{sa}^s-2)! \cdot (n+j_{sa}^s-s-j_s)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{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)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \left(\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

$$\left(\frac{(n_i - s - 1)!}{(n_i - n - 1)! \cdot (n - s)!} \right)_{j_i}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \end{aligned}$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!}
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1} \\ &\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \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 \\ &\quad \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)!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\ &\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\ &\quad \left. \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)!} + \right. \\ &\quad \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\ &\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Bigg) -$$

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

$D = n < n \wedge l_k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \vee$

$I = l_k + 1 \wedge s > 1 \wedge l_{k_2} > 0 \wedge l_{k_1} = 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge$

$l_{k_z}: z = 1 \wedge l_k = l_{k_2} \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+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)!}{(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)!} + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{n} \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} \Big) -
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{n} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right. \\ \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \right. \\ \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right)$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
 \end{aligned}$$

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

$$\frac{(n_i + j_i + j_{sa}^s - j_s - 2 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + j_i + j_{sa}^s - j_s - 2 \cdot s)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!} \cdot \\
& \frac{(n_i-n_{i_s}-1)!}{(j_s-2)! \cdot (n_i-n_{i_s}-j_s+1)!} \cdot \frac{(n_{i_s}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_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)!} \Big) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s-I)!}{(n_i-n-I)! \cdot (n+2 \cdot j_i+j_{sa}^s+j_{sa}^{ik}-j_s-j_{ik}-3 \cdot s)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{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-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}$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 & \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
 & \quad \left. \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)!} \right) + \\
 & \quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 & \quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
 & \quad \left. \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)!} \right) - \\
 & \quad (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^n \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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 + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s)!}
 \end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \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 \\ &\quad \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)!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\ &\quad \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)!} + \\ &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\ &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \end{aligned}$$

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i + j_s + j_{s_a}^{ik} - j_{ik} - s - I - j_{s_a}^s)!}{(n_i - n - I)! \cdot (n + j_s + j_{s_a}^{ik} - j_{ik} - s - j_{s_a}^s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{s_a}^{ik}}^n \right.$$

$$\left. \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right) + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot
 \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\quad \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\ &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\ &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\ &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Bigg) -$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{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)!} + (D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

$$\begin{aligned}
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(j_i-j_{i_k}-1)!}{(j_i+j_{s_a}^{i_k}-j_{i_k}-s)! \cdot (s-j_{s_a}^{i_k}-1)!} \cdot \\
 & \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}+j_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)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k})}^{(n+j_{s_a}^{i_k}-s)} \sum_{j_i=j_{i_k}+s-j_{s_a}^{i_k}}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(j_i-j_{i_k}-1)!}{(j_i+j_{s_a}^{i_k}-j_{i_k}-s)! \cdot (s-j_{s_a}^{i_k}-1)!} \cdot \\
 & \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}+j_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)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \Big) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(n_i+j_{i_k}-j_i-I-j_{s_a}^{i_k})!}{(n_i-n-I)! \cdot (n+j_{i_k}-j_i-j_{s_a}^{i_k})!}
 \end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}_1+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \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 \\
&\quad \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)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}_1+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \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)!} + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \\
&\quad \sum_{(n_i=\mathbf{n}+\mathbb{k}_1+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \left. \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)!} \right) -
\end{aligned}$$

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

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

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik} - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + j_{ik} - j_i - j_{sa}^{ik})!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

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

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

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

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
{}_0 S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^{n} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \right. \\ &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{n} \right) \end{aligned}$$

$$\begin{aligned}
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{i_s}^{\mathbb{k}}-1)}^{()} \sum_{j_i=j_{i_k}+1}^{()} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2}^{()} \\
 & \left(\frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s)!} \right)_{j_i}
 \end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{i_k} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{i_k} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}-\mathbb{k}_2-1} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - \mathbb{k}_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - \mathbb{k}_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +
 \end{aligned}$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \right. \\
 & \quad \left. \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)!} + \right. \\
 & \quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \quad \left. \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right. \\
 & \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \right. \\
 & \quad \left. \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)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\quad)} \sum_{j_i=j_{ik}+1}^n \\
 & \quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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 \left(\frac{(n_i - s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} - s)!} \right)_{j_i}
 \end{aligned}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big)^{-}$$

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i - s - I)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} - s - 1)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^{\mathbf{n}}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{is}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - s - k_1 - k_2 - 1)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - s - 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

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

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right.$$

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^n \\
& \frac{(n_i + j_s - j_{ik} - k_1 - k_2 - j_{sa}^s - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_s - j_{ik} - j_{sa}^s - 1)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1}
\end{aligned}$$

$$\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_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_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)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \right) - \\
 & \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)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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}
 \end{aligned}$$

$$\frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - n - I)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right)
 \end{aligned}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \right. \\
 & \quad \left. \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)!} + \right. \\
 & \quad \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \quad \left. \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right. \\
 & \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \right. \\
 & \quad \left. \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)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{(\quad)} \sum_{j_i=j_{ik}+1}^n \\
 & \quad \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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_{ik} + j_{sa}^s - j_s - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!}
 \end{aligned}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Bigg)^{-}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right.$$

$$\left. \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right)$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+k_2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - I + 1)!}{(n_i - n - I)! \cdot (n + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
&\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
&\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
\end{aligned}$$

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

$$\frac{\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}}{(n_i + j_i + j_{sa}^s + j_{sa}^{lk} - j_s - 3 \cdot s - lk_1 - lk_2)!}$$

$$\frac{(n_i - n - lk_1 - lk_2 - 1)! \cdot (n + j_i + j_{sa}^s + j_{sa}^{lk} - j_s - 3 \cdot s + 1)!}{(n_i - n - lk_1 - lk_2 - 1)! \cdot (n + j_i + j_{sa}^s + j_{sa}^{lk} - j_s - 3 \cdot s + 1)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\frac{\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1}}{(n_i - n_{is} - 1)! \cdot (n_{is} - n_{ik} - lk_1 - 1)!}$$

$$\frac{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! \cdot (j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}{(n_s - 1)! \cdot (n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\left. \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \right.$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)! \cdot (n_{is} - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)! \cdot (j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right)$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}^{()} \\
& \frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - I - j_{sa}^s + 1)!}{(n_i - n - I)! \cdot (n + j_s + j_{sa}^{ik} - j_i - s - j_{sa}^s + 1)!}
\end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1}
\end{aligned}$$

$$\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_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_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)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \right) - \\
 & \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)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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}
 \end{aligned}$$

$$\frac{(n_i + j_s + j_{sa}^{ik} - j_i - s - k_1 - k_2 - j_{sa}^s)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_s + j_{sa}^{ik} - j_i - s - j_{sa}^s + 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\ &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right) \end{aligned}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right. \\
 & \quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 & \quad \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \quad \quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \quad \quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right. \\
 & \quad \quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\quad)} \sum_{j_i=j_{ik}+1}^n \\
 & \quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{(\quad)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \quad \frac{(n_i + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - k_1 - k_2 - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - 1)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Bigg)^{-}$$

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\cdot)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

$$\frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - I - 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}!$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\left. \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right)$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - k_1 - k_2 - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_{ik} + j_{sa}^s - j_s - 2 \cdot j_{sa}^{ik} - 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\quad \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_{ik}=n_{is}-lk_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_{ik}=n_{is}+j_{ik}-j_i-lk_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right)$$

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
& \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
& \frac{(n_i - k_1 - k_2 - j_{sa}^{ik} - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - j_{sa}^{ik} - 1)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1}
\end{aligned}$$

$$\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_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_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)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \left. \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \right) - \\
 & \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)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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}
 \end{aligned}$$

$$\frac{(n_i + j_{sa}^{ik} - 2 \cdot s - I + 1)!}{(n_i - n - I)! \cdot (n + j_{sa}^{ik} - 2 \cdot s + 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right)
 \end{aligned}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \frac{(n_i-n_{i_s}-1)!}{(j_s-2)! \cdot (n_i-n_{i_s}-j_s+1)!} \cdot \frac{(n_{i_s}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \Bigg) -$$

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

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i-n_{i_s}-1)!}{(j_s-2)! \cdot (n_i-n_{i_s}-j_s+1)!} \cdot \frac{(n_{i_s}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} +$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \\
 &\quad \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}$$

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

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

$$\begin{aligned}
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \right. \\
 & \quad \left. \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \right) + \\
 & \quad \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \right. \\
 & \quad \left. \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-n-1)! \cdot (n-j_i)!} \right) - \\
 & \quad (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{\mathbb{k}}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
 & \quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 & \quad \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-s-\mathbb{k}-1)!}{(n_{is}+j_s-n-\mathbb{k}-j_{sa}^s-1)! \cdot (n+j_{sa}^s-s-j_s)!}
 \end{aligned}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}
\end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \left(\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\begin{aligned}
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(j_i-j_{i_k}-1)!}{(j_i+j_{s_a}^{i_k}-j_{i_k}-s)! \cdot (s-j_{s_a}^{i_k}-1)!} \cdot \\
 & \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}+j_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)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k})}^{(n+j_{s_a}^{i_k}-s)} \sum_{j_i=j_{i_k}+s-j_{s_a}^{i_k}}^n \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=\mathbf{n}+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2} \\
 & \frac{(j_{i_k}-j_s-1)!}{(j_{i_k}-j_s-j_{s_a}^{i_k}+1)! \cdot (j_{s_a}^{i_k}-2)!} \cdot \frac{(j_i-j_{i_k}-1)!}{(j_i+j_{s_a}^{i_k}-j_{i_k}-s)! \cdot (s-j_{s_a}^{i_k}-1)!} \cdot \\
 & \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}+j_s-n_{i_k}-j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k}-n_s-1)!}{(j_i-j_{i_k}-1)! \cdot (n_{i_k}+j_{i_k}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-\mathbf{n}-1)! \cdot (\mathbf{n}-j_i)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j_i=j_s+s-1} \\
 & \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{i_k}+j_{i_k}-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_k}+j_{i_k}-j_s-s-\mathbb{k}_2-1)!}{(n_{i_k}+j_{i_k}-\mathbf{n}-\mathbb{k}_2-j_{s_a}^s-1)! \cdot (\mathbf{n}+j_{s_a}^s-s-j_s)!}
 \end{aligned}$$

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{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)!} + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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
 \end{aligned}$$

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

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

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-\mathbb{k}_2}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}$$

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

$$\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \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 \\
 &\quad \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)!} + \\
 &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{n} \right. \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
 &\quad \left. \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)!} + \right. \\
 &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \\
 &\quad \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
 &\quad \left. \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)!} \right) -
 \end{aligned}$$

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

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

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

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \right)$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_s+s-1} \\ &\frac{\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_{ik}=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1}}{\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - 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_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_{ik}+2}^n \right. \\ &\left. \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}} \right) \cdot \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - 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}$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^n \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{ik} + j_i - j_s - s - k_2 - 2)!}{(n_{ik} + j_i - n - k_2 - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^n$$

$$\begin{aligned}
 & \sum_{\substack{(n-1) \\ (n_i=n+k+1)}} \sum_{n_i=n+k_1+k_2-j_s+2}^{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+2}^{n_{ik}-k_2-1} \\
 & \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_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{\substack{(n-1) \\ (n_i=n+k+1)}} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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 \\
 & \left. \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)!} + \right. \\
 & \left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \sum_{\substack{(n-1) \\ (n_i=n+k+1)}} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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 \\
 & \left. \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)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{is}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^n
 \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \right)$$

$$\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 - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left. \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)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(\)} \sum_{n_s=\mathbf{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_{ik} + j_{sa}^{ik} - s - \mathbb{k}_2 - j_{sa}^s - 1)!}{(n_{ik} + j_i - \mathbf{n} - \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^{ik} - s - j_i + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge \mathbf{s} > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

$$\begin{aligned}
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\
 & \left. \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \right. \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{is}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^n
 \end{aligned}$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$

$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+s-2}} \sum_{j_i=j_s+s-1} \frac{\sum_{\binom{n-1}{n_i=n+k+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=n+k_1+k_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-k_1)}{n_{ik}=n+k_2-j_{ik}+2}} \sum_{n_s=n-j_i+2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+s-2}} \sum_{j_i=j_{ik}+2}^n \sum_{\binom{n-1}{n_i=n+k+1}} \sum_{\binom{n_i-j_s+1}{n_{is}=n+k_1+k_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-k_1)}{n_{ik}=n+k_2-j_{ik}+2}} \sum_{n_s=n-j_i+2} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_i - s - 2 \cdot k_1 - k_2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_i - n - 2 \cdot k_1 - k_2 - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\begin{aligned}
 & \sum_{\substack{(n-1) \\ (n_i=n+k_1+1)}} \sum_{\substack{n_i-j_s+1 \\ n_{i_s}=n+k_1+k_2-j_s+2}} \sum_{\substack{(n_{i_s}+j_s-j_{ik}-k_1) \\ (n_{ik}=n+k_2-j_{ik}+2)}} \sum_{\substack{n_{ik}-k_2-1 \\ n_s=n-j_i+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} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+s-2}} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{\substack{(n-1) \\ (n_i=n+k_1+1)}} \sum_{\substack{n_i-j_s+1 \\ n_{i_s}=n+k_1+k_2-j_s+2}} \sum_{\substack{(n_{i_s}+j_s-j_{ik}-k_1) \\ (n_{ik}=n+k_2-j_{ik}+2)}} \sum_{\substack{n_{ik}+j_{ik}-j_i-k_2 \\ n_s=n-j_i+2}} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \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)!} + \right. \\
 & \left. \sum_{j_s=2}^{n-s+1} \sum_{\binom{(n-1)}{j_{ik}=j_s+s-1}} \sum_{j_i=j_{ik}+1}^n \right. \\
 & \sum_{\substack{(n-1) \\ (n_i=n+k_1+1)}} \sum_{\substack{n_i-j_s+1 \\ n_{i_s}=n+k_1+k_2-j_s+2}} \sum_{\substack{(n_{i_s}+j_s-j_{ik}-k_1) \\ (n_{ik}=n+k_2-j_{ik}+2)}} \sum_{\substack{n_{ik}+j_{ik}-j_i-k_2 \\ n_s=n-j_i+2}} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \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)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{i_s}^k-1}} \sum_{j_i=j_{ik}+1}^n
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}
\end{aligned}$$

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s - j_{sa}^s - 1)!}{(n_s + j_i - \mathbf{n} - j_{sa}^s - 1)! \cdot (\mathbf{n} - j_{sa}^s)!}$$

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j_i=j_s+s-1} \\
 &\sum_{\binom{(n-1)}{(n_i=\mathbf{n}+\mathbb{k}+1)}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}} \sum_{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}{n_s=\mathbf{n}-j_i+2}} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
 &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+j_{sa}^{ik}-1}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 &\sum_{\binom{(n-1)}{(n_i=\mathbf{n}+\mathbb{k}+1)}} \sum_{\binom{n_i-j_s+1}{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}} \sum_{\binom{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}} \sum_{\binom{n_{ik}+j_{ik}-j_i-\mathbb{k}_2}{n_s=\mathbf{n}-j_i+2}} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{\binom{(n+j_{sa}^{ik}-s)}{(j_{ik}=j_s+j_{sa}^{ik})}} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n
 \end{aligned}$$

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

$$\frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!}$$

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

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

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

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

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

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

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

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

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

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

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \right. \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Bigg) -$$

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - n - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!}$$

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

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

$$\sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k})}^{(n+j_{s_a}^{i_k}-s)} \sum_{j_i=j_{i_k}+s-j_{s_a}^{i_k}}^n$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+\mathbb{k}_2-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2}$$

$$\frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!}$$

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

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

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+j_{s_a}^{i_k}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n_{i_s}+j_s-j_{i_k}-\mathbb{k}_1)}^{(\)} \sum_{n_s=n_{i_k}+j_{i_k}-j_i-\mathbb{k}_2}^{(\)}$$

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

$$\frac{(3 \cdot n_{i_s} + 2 \cdot j_s - n_{i_k} - n_s - j_{i_k} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)!}{(3 \cdot n_{i_s} + 3 \cdot j_s - n_{i_k} - n_s - j_{i_k} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{s_a}^s - 1)! \cdot (n + j_{s_a}^s - s - j_s)!}$$

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{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)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} +
 \end{aligned}$$

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

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

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

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

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

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

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

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

$$\left. \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \right)$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+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)!}{(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)!} + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{n} \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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)!} \Big) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()}$$

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

$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \vee$

$l = k + 1 \wedge s > 1 \wedge k > 0 \wedge l = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$l = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge l = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \right)$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-l_{k_1})}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-l_{k_2}}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_s + j_{ik} - j_s - s)!}{(n_s + j_{ik} - n - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge l_k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge$$

$$l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \wedge j_{ik} = j_i - 1 \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_{k_2} > 0 \wedge l_{k_1} = 0 \wedge I = 1 \wedge$$

$$s = s + l_k + 1 \wedge l_{k_z}: z = 1 \wedge l_k = l_{k_2} \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-l_{k_1})}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{n_{ik}=l_{k_2}-1}^{n_{ik}-l_{k_2}-1}$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - l_{k_1})!}$$

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

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{is}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \Big) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_s - j_{sa}^s - 1)!}{(n_s + j_{ik} - n - j_{sa}^s)! \cdot (n - j_{ik} - 1)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$

$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(2 \cdot n_{is} + j_s - n_s - j_{ik} - s - 2 \cdot lk_1 - 2 \cdot lk_2 - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_{ik} - n - 2 \cdot lk_1 - 2 \cdot lk_2 - j_{sa}^s - 2)! \cdot (n - s)!}$$

$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$

$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$

$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$

$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n_{is}-lk_2-1}^{n_{ik}-lk_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \left(\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \right. \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_{ik} - s - 2 \cdot k - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_{ik} - n - 2 \cdot k - j_{sa}^s - 2)! \cdot (n - s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
\end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 3 \cdot lk_1 - 2 \cdot lk_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - n - 3 \cdot lk_1 - 2 \cdot lk_2 - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n_{is}-lk_2-1}^{n_{ik}-lk_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_i-lk_2}^{n_{ik}+j_{ik}-j_i-lk_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{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)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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 - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 2)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot lk - lk_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - n - 2 \cdot lk - lk_1 - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n+lk_2-j_{ik}+2}^{n_{ik}-lk_2-1} \sum_{n_s=n-j_i+2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n+lk_2-j_{ik}+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{n_s=n-j_i+2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

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

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

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

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

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

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

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
&\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
&\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
\end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(2 \cdot n_{ik} + j_{ik} - n_s - j_s - s - 2 \cdot lk_2 - 2)!}{(2 \cdot n_{ik} + j_{ik} - n_s - n - 2 \cdot lk_2 - j_{sa}^s - 2)! \cdot (n - s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n_{is}-lk_2-1}^{n_{ik}-lk_2-1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{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)!} + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 - \mathbf{n} - 1)! \cdot (\mathbf{n} - j_i)!} \Big) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{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 - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
& \frac{(2 \cdot n_{ik} + j_{ik} + 2 \cdot \mathbb{k}_1 - n_s - j_s - s - 2 \cdot \mathbb{k} - 2)!}{(2 \cdot n_{ik} + j_{ik} + 2 \cdot \mathbb{k}_1 - n_s - \mathbf{n} - 2 \cdot \mathbb{k} - j_{sa}^s - 2)! \cdot (\mathbf{n} - s)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} + \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} \right) -
 \end{aligned}$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} + n_{ik} - n_s - s - 2 \cdot lk_2 - lk_1 - 2)!}{(n_{is} + n_{ik} + j_s - n_s - n - 2 \cdot lk_2 - lk_1 - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n+lk_2-j_{ik}+2}^{n_{ik}-lk_2-1} \sum_{n_s=n-j_i+2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - n - 1)! \cdot (n - j_i)!} +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-lk_1)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_{ik}=n+lk_2-j_{ik}+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{n_s=n-j_i+2}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{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)!} + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \left(\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \right. \\
 & \left. \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)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{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 - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} + n_{ik} + k_1 - n_s - s - 2 \cdot k - 2)!}{(n_{is} + n_{ik} + j_s + k_1 - n_s - n - 2 \cdot k - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{i_s}+j_s-j_{ik}-k_1)}^{(n)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{(n_i-n-I)!}{(n_i-n-I)! \cdot (n-s)!} \Bigg)_{j_i}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{(n-1)} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{s_a}^{ik}+1}^n \right)$$

$$\begin{aligned}
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k})}^{(n + j_{s_a}^{i_k} - s)} \sum_{j_i = j_{i_k} + s - j_{s_a}^{i_k}}^n \\
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1)}^{()} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - k_2}^{()} \\
& \left(\frac{(n_i - s - k_1 - k_2 - 1)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - s)!} \right)_{j_i}
\end{aligned}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbf{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge \mathbf{k}_z: z = 2 \wedge \mathbf{k} = \mathbf{k}_1 + \mathbf{k}_2 \vee$$

$$I = \mathbf{k} + 1 \wedge s > 1 \wedge \mathbf{k}_2 > 0 \wedge \mathbf{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbf{k} + 1 \wedge$$

$$\mathbf{k}_z: z = 1 \wedge \mathbf{k} = \mathbf{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}_1+\mathbf{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbf{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}_2} \sum_{(i=2)}^{(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} - \mathbf{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbf{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbf{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbf{k}_2)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbf{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbf{k}_1+\mathbf{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbf{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbf{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbf{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 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)!} \\ &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right. \\ &\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(\mathbf{n}+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{\mathbf{n}} \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}_0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!}
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{(n-j_i+1)} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}^{()} \frac{(n_i + j_s - j_i - lk_1 - lk_2 - j_{sa}^s - 1)!}{(n_i - n - lk_1 - lk_2 - 1)! \cdot (n + j_s - j_i - j_{sa}^s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge lk_z: z = 2 \wedge lk = lk_1 + lk_2 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 1 \wedge lk = lk_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!} \cdot \frac{(n_{ik} - n_s - lk_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - lk_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\frac{\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)! \cdot (j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(n_{ik}-n_s-k_2-1)!} \cdot \frac{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}{(n_s-2)!} \\ &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\ &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right. \\ &\frac{\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}}{(j_{ik}-j_s-1)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!}{(n_i-n_{is}-1)!} \\ &\frac{(n_{is}-n_{ik}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)! \cdot (j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \\ &\left. \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \right. \\ &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \right) \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = n + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = n + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = n + \mathbb{k}_2 - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_s = n - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{i_s}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \sum \frac{(n_i + j_i + j_{sa}^s - j_s - 2 \cdot s - I)!}{(n_i - n - I)! \cdot (n + j_i + j_{sa}^s - j_s - 2 \cdot s)!}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

$$(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\ \frac{(n_i + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s - I)!}{(n_i - n - I)! \cdot (n + 2 \cdot j_i + j_{sa}^s + j_{sa}^{ik} - j_s - j_{ik} - 3 \cdot s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\begin{aligned}
& \sum_{(n_i = n + \mathbb{k}_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + \mathbb{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k})}^{(n + j_{s_a}^{i_k} - s)} \sum_{j_i = j_{i_k} + s - j_{s_a}^{i_k}}^n \\
& \sum_{(n_i = n + \mathbb{k}_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + \mathbb{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = n + \mathbb{k}_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - \mathbb{k}_1)}^{()} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - \mathbb{k}_2}^{()} \\
& \frac{(n_i + 2 \cdot j_i + j_{s_a}^s + j_{s_a}^{i_k} - j_s - j_{i_k} - 3 \cdot s - \mathbb{k}_1 - \mathbb{k}_2 - 1)!}{(n_i - n - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (n + 2 \cdot j_i + j_{s_a}^s + j_{s_a}^{i_k} - j_s - j_{i_k} - 3 \cdot s)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + j_{sa}^{ik} - 1)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{is} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = n + k_2 - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{ik} + j_{ik} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
& \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}
\end{aligned}$$

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

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

$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}^{(\)}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\frac{\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)! \cdot (j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-k_1)!} \cdot \frac{(n_{is}-n_{ik}-k_1-1)!}{(n_{ik}-n_s-k_2-1)!} \cdot \frac{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-k_2)!}{(n_s-i-1)!} \\ &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\ &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\frac{\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}}{(j_{ik}-j_s-1)!} \cdot \frac{(j_i-j_{ik}-1)!}{(j_{ik}-j_s-j_{sa}^{ik}+1)! \cdot (j_{sa}^{ik}-2)!} \cdot \frac{(j_i+j_{sa}^{ik}-j_{ik}-s)! \cdot (s-j_{sa}^{ik}-1)!}{(n_i-n_{is}-1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \\ &\left. \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \right) + \\ &\left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\ &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \end{aligned}$$

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \\
& \frac{(n_{ik}-n_s-\mathbb{k}_2-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i-\mathbb{k}_2)!}
\end{aligned}$$

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

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-k_1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \sum_{n_s=n-j_i+2}^{(n-j_i+1)} \sum_{(i=2)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-k_1)}^{(n_{ik}+j_{ik}-j_i-k_2)} \sum_{n_s=n-j_i+2}^{(n-j_i+1)} \sum_{(i=2)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_s+s-1}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z : z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z : z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 &\left. \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \right)
 \end{aligned}$$

$$\begin{aligned}
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k})!} \\
& \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{()} \sum_{j_i = j_{i_k} + 1}^{()} \\
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1)}^{()} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - k_2}^{()} \\
& \left(\frac{(n_i - s - 1)!}{(n_i - n - 1)! \cdot (n - s)!} \right)_{j_i}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{i_k} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{i_k} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{i_k} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
& {}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 2)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} - k_2 - 1} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - k_1)!}
\end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{\binom{n-1}{n_i=n+k+1}} \sum_{n_i-j_s+1}^{n_i-j_s+1} \sum_{\binom{()}{n_{ik}=n_{is}+j_s-j_{ik}-k_1}} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \sum_{\left(\frac{(n_i - s - k_1 - k_2 - 1)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - s)!} \right)_{j_i}}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$

$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+s-2}} \sum_{j_i=j_s+s-1} \\ &\sum_{\binom{n-1}{n_i=n+k+1}} \sum_{n_i-j_s+1}^{n_i-j_s+1} \sum_{\binom{n_{is}+j_s-j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+2}} \sum_{n_{ik}-k_2-1}^{n_{ik}-k_2-1} \sum_{\binom{n-j_i+1}{i=2}} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{\binom{()}{j_{ik}=j_s+s-2}} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{\binom{n-1}{n_i=n+k+1}} \sum_{n_i-j_s+1}^{n_i-j_s+1} \sum_{\binom{n_{is}+j_s-j_{ik}-k_1}{n_{ik}=n+k_2-j_{ik}+2}} \sum_{n_{ik}+j_{ik}-j_i-k_2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{\binom{n-j_i+1}{i=2}} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \end{aligned}$$

$$\begin{aligned}
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - s - I)!}{(n_i - n - I)! \cdot (n - s - 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\begin{aligned}
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} - k_2 - 1} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - k_1)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 2)}^{()} \sum_{j_i = j_{i_k} + 2}^n \right. \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_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)!} \right) + \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 1)}^{(n-1)} \sum_{j_i = j_{i_k} + 1}^n \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_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)!}
 \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

$$\frac{(n_i - s - lk_1 - lk_2 - 1)!}{(n_i - n - lk_1 - lk_2 - 1)! \cdot (n - s - 1)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$q_{S_0}^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)$$

$$\begin{aligned}
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{ik}^s-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i + j_s - j_{ik} - I - j_{sa}^s - 1)!}{(n_i - n - I)! \cdot (n + j_s - j_{ik} - j_{sa}^s - 1)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$

$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\quad \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)!} \\
 &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right. \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) + \\
 &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - I - 2 \cdot j_{sa}^s + 1)!}{(n_i - n - I)! \cdot (n + 2 \cdot j_s + j_{sa}^{ik} - 2 \cdot j_i - 2 \cdot j_{sa}^s + 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_s+s-1}^{(\quad)} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \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 \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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 \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \right. \\
&\quad \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right.
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{D0s} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\begin{aligned}
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 2)}^{(n_{is} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{is} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{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}^{\mathbf{n}} \\
& \frac{(n_i + j_{ik} + j_{sa}^s - j_s - 2 \cdot s - I + 1)!}{(n_i - \mathbf{n} - I)! \cdot (\mathbf{n} + j_{ik} + j_{sa}^s - j_s - 2 \cdot s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{(n_{is}=n+k_1+k_2-j_s+2)}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{(n_s=n-j_i+2)}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
 & (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \frac{(n_i-n_{i_s}-1)!}{(j_s-2)! \cdot (n_i-n_{i_s}-j_s+1)!} \cdot \frac{(n_{i_s}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \right) \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \frac{(n_i-n_{i_s}-1)!}{(j_s-2)! \cdot (n_i-n_{i_s}-j_s+1)!} \cdot \frac{(n_{i_s}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{i_s}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \right) - \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right)
 \end{aligned}$$

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

$$\frac{(n_i + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s - I + 1)!}{(n_i - n - I)! \cdot (n + j_i + j_{sa}^s + j_{sa}^{ik} - j_s - 3 \cdot s + 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) + \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i+j_i+j_{sa}^s+j_{sa}^{ik}-j_s-3 \cdot s-k_1-k_2)!}{(n_i-n-k_1-k_2-1)! \cdot (n+j_i+j_{sa}^s+j_{sa}^{ik}-j_s-3 \cdot s+1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\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)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -
\end{aligned}$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!}$$

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

$$\begin{aligned}
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{\mathbf{n}} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1} \\
& \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{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_{sa}^{ik} - j_i - s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^s)!}{(n_i - \mathbf{n} - \mathbb{k}_1 - \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_s + j_{sa}^{ik} - j_i - s - j_{sa}^s + 1)!}
\end{aligned}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 &\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\quad \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)!} \\
 &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^{()} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\
 &\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right. \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
 &\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) + \\
 &\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^{()} \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \\
 &\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - k_1 - k_2 - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_i + j_{sa}^s - j_s - j_{sa}^{ik} - s - 1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
&\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
&\quad (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\quad \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\quad \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right)
\end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{D0s} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\begin{aligned}
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_s - n_{i_k} - j_{i_k})!} \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 1)}^{(n-1)} \sum_{j_i = j_{i_k} + 1}^n \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_s - n_{i_k} - j_{i_k})!} \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{(\)} \sum_{j_i = j_{i_k} + 1}^{(\)} \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1)}^{(\)} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - k_2}^{(\)} \\
 & \frac{(n_i + j_{i_k} + j_{s_a}^s - j_s - 2 \cdot j_{s_a}^{i_k} - k_1 - k_2 - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n + j_{i_k} + j_{s_a}^s - j_s - 2 \cdot j_{s_a}^{i_k} - 1)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \wedge j_{i_k} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$

$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) - \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right)
 \end{aligned}$$

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

$$\frac{(n_i - k_1 - k_2 - j_{sa}^{ik} - 2)!}{(n_i - n - k_1 - k_2 - 1)! \cdot (n - j_{sa}^{ik} - 1)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) + \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +
 \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^i-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i+j_{sa}^{ik}-2 \cdot s-I+1)!}{(n_i-n-I)! \cdot (n+j_{sa}^{ik}-2 \cdot s+1)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\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)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\cdot)} \sum_{j_i=j_{ik}+2}^n \right. \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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})!} \\
& \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -
\end{aligned}$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right.$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_Z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\
 &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 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)!} \\
 &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

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

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

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + s - 2)}^{()} \sum_{j_i = j_s + s - 1} \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 2)}^{(n_{i_s} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} - \mathbb{k}_2 - 1} \sum_{(i=2)}^{(n - j_i + 1)} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik} = j_s + s - 2)}^{()} \sum_{j_i = j_{ik} + 2}^n \sum_{(n_i = \mathbf{n} + \mathbb{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{ik} = \mathbf{n} + \mathbb{k}_2 - j_{ik} + 2)}^{(n_{i_s} + j_s - j_{ik} - \mathbb{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{ik} + j_{ik} - j_i - \mathbb{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \right)$$

$$\begin{aligned}
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \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 \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\)} \sum_{j_i=j_{ik}+1}^{(\)} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{(\)} \sum_{n_s=n_{ik}+j_{ik}-j_{sa}-k_2}^{(\)} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(n_{is} - s - k_1 - k_2 - 1)!}{(n_{is} + j_s - n - k_1 - k_2 - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

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

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

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

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

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}_0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \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)!} \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
&\quad (D-s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right. \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\quad \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) + \\
&\quad \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
&\quad \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\quad \sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\quad \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \\
&\quad \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 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}$$

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\begin{aligned}
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_s - n_{i_k} - j_{i_k})!} \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 1)}^{(n-1)} \sum_{j_i = j_{i_k} + 1}^n \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \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} + j_s - n_{i_k} - j_{i_k})!} \\
 & \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{(\)} \sum_{j_i = j_{i_k} + 1}^{(\)} \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - k_1)}^{(\)} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - k_2}^{(\)} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!}
 \end{aligned}$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^{\mathbf{n}} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right) \end{aligned}$$

$$\begin{aligned}
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
& \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
& \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
& \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
& (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
& \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
& \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
& \frac{(n_{ik}+j_{sa}^{ik}-s-k_2-j_{sa}^s-1)!}{(n_{ik}+j_i-n-k_2-j_{sa}^s-2)! \cdot (n+j_{sa}^{ik}-s-j_i+1)!}
\end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\begin{aligned}
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+l_{k_2}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{i_k}-l_{k_2}-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \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 - n_{i_k} - j_{i_k} - l_{k_1})!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+s-2)}^{()} \sum_{j_i=j_{i_k}+2}^n \right. \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+l_{k_2}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \right) + \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{i_k}+1}^n \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{i_k}=n+l_{k_2}-j_{i_k}+2)}^{(n_{i_s}+j_s-j_{i_k}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{i_k}+j_{i_k}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \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} + j_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)!} \cdot
 \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

$$\frac{(n_{ik} + j_{sa}^{ik} + lk_1 - s - lk - j_{sa}^s - 1)!}{(n_{ik} + j_i + lk_1 - n - lk - j_{sa}^s - 2)! \cdot (n + j_{sa}^{ik} - s - j_i + 1)!}$$

$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$

$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$

$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$

$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right)$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_{ik} - j_i - s - 2 \cdot k_1 - k_2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_{ik} - j_i - n - 2 \cdot k_1 - k_2 - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
&\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{(\quad)} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
&\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
&\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
&\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
&\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
\end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_{ik}+1}^{(n-1)} \sum_{(n_i=n+k+1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{(n-1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(2 \cdot n_{is} + j_s + k_2 - n_{ik} - j_i - s - 2 \cdot k)!}{(2 \cdot n_{is} + 2 \cdot j_s + k_2 - n_{ik} - j_i - n - 2 \cdot k - j_{sa}^s)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$

$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$

$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$

$k_z: z = 1 \wedge k = k_2 \Rightarrow$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)} \sum_{j_i=j_s+s-1}^{(n-1)} \sum_{(n_i=n+k+1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2} \sum_{(i=2)}^{n_{ik}+j_{ik}-j_i-k_2} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \frac{(n_{ik} - n_s - k_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - k_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

$$D = n < n \wedge l_k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_k > 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge l_{k_z}: z = 2 \wedge l_k = l_{k_1} + l_{k_2} \vee$$

$$I = l_k + 1 \wedge s > 1 \wedge l_{k_2} > 0 \wedge l_{k_1} = 0 \wedge I = 1 \wedge s = s + l_k + 1 \wedge$$

$$l_{k_z}: z = 1 \wedge l_k = l_{k_2} \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - l_{k_1} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - l_{k_1})!} \cdot \frac{(n_{ik} - n_s - l_{k_2} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - l_{k_2})!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{s_a}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{s_a}^{ik}+1}^n \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{s_a}^{ik} + 1)! \cdot (j_{s_a}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{s_a}^{ik} - j_{ik} - s)! \cdot (s - j_{s_a}^{ik} - 1)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \right)$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 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 \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik})}^{(n+j_{sa}^{ik}-s)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^n \\
 &\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \cdot
 \end{aligned}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_s+s-1}^{(\cdot)} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{()} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\ &\frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!} \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}}^{n} \sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \right. \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\ &\left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 3 \cdot k_1 - 2 \cdot k_2 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - n - 3 \cdot k_1 - 2 \cdot k_2 - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - s - 2 \cdot \mathbb{k} - \mathbb{k}_1 - 1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - j_{ik} - j_i - n - 2 \cdot \mathbb{k} - \mathbb{k}_1 - j_{sa}^s - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \frac{(n_{ik} - n_s - \mathbb{k}_2 - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i - \mathbb{k}_2)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^n \right)$$

$$\begin{aligned}
& \sum_{(n_i = \mathbf{n} + \mathbf{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbf{k}_1 + \mathbf{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = \mathbf{n} + \mathbf{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbf{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbf{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
& \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k})}^{(n + j_{s_a}^{i_k} - s)} \sum_{j_i = j_{i_k} + s - j_{s_a}^{i_k}}^n \\
& \sum_{(n_i = \mathbf{n} + \mathbf{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbf{k}_1 + \mathbf{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = \mathbf{n} + \mathbf{k}_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - \mathbf{k}_1)} \sum_{n_s = \mathbf{n} - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - \mathbf{k}_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
& \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - j_{s_a}^{i_k} + 1)! \cdot (j_{s_a}^{i_k} - 2)!} \cdot \frac{(j_i - j_{i_k} - 1)!}{(j_i + j_{s_a}^{i_k} - j_{i_k} - s)! \cdot (s - j_{s_a}^{i_k} - 1)!} \cdot \\
& \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} + j_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)!} \cdot \\
& \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) - \\
& (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + j_{s_a}^{i_k} - 1)}^{()} \sum_{j_i = j_s + s - 1}^{()} \\
& \sum_{(n_i = \mathbf{n} + \mathbf{k} + 1)}^{(n-1)} \sum_{n_{i_s} = \mathbf{n} + \mathbf{k}_1 + \mathbf{k}_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n_{i_s} + j_s - j_{i_k} - \mathbf{k}_1)}^{()} \sum_{n_s = n_{i_k} + j_{i_k} - j_i - \mathbf{k}_2}^{()} \\
& \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot
\end{aligned}$$

$$\frac{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_s - j_i - s - 2 \cdot \mathbb{k}_2 - 1)!}{(2 \cdot n_{ik} + 2 \cdot j_{ik} - n_s - j_i - \mathbf{n} - 2 \cdot \mathbb{k}_2 - j_{sa}^s - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < \mathbf{n} \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_s+s-1}^{\mathbf{n}} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(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 \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - j_{sa}^{ik} + 1)! \cdot (j_{sa}^{ik} - 2)!} \cdot \frac{(j_i - j_{ik} - 1)!}{(j_i + j_{sa}^{ik} - j_{ik} - s)! \cdot (s - j_{sa}^{ik} - 1)!} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 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)!} \cdot \\ &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) \right) + \end{aligned}$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge k_z: z = 2 \wedge k = k_1 + k_2 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 1 \wedge k = k_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_s+s-1}^{(\cdot)}$$

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

$$\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) -$$

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

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}$$

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

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

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{\mathbf{n}-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{(\cdot)} \sum_{j_i=j_{ik}+s-j_{sa}^{ik}+1}^{\mathbf{n}} \right)$$

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

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

$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$

$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$

$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$

$$\begin{aligned} {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\ &\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\ &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\ &\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\ &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\ &\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\ &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\ &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \right) \end{aligned}$$

$$\begin{aligned}
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^k-1)}^{()} \sum_{j_i=j_{ik}+1} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_s+j_{ik}-j_s-s)!}{(n_s+j_{ik}-n-j_{sa}^s)! \cdot (n+j_{sa}^s-s-j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\begin{aligned}
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} - k_2 - 1} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - k_1)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 2)}^{()} \sum_{j_i = j_{i_k} + 2}^n \right. \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \right. \\
 & \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 1)}^{(n-1)} \sum_{j_i = j_{i_k} + 1}^n \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \right.
 \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

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

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(2 \cdot n_{is} + j_s - n_s - j_{ik} - s - 2 \cdot k_1 - 2 \cdot k_2 - 2)!}{(2 \cdot n_{is} + 2 \cdot j_s - n_s - j_{ik} - n - 2 \cdot k_1 - 2 \cdot k_2 - j_{sa}^s - 2)! \cdot (n - s)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_z > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) - \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right)
 \end{aligned}$$

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

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - \mathbf{n} - 3 \cdot \mathbb{k}_1 - 2 \cdot \mathbb{k}_2 - 1)! \cdot (\mathbf{n} + j_{sa}^s - s - j_s)!}$$

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge \mathbf{s} = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
&\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{ik}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 3 \cdot k_1 - 2 \cdot k_2 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - n - 3 \cdot k_1 - 2 \cdot k_2 - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+1}^{()}$$

$$\begin{aligned}
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} - k_2 - 1} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{i_k} - k_1 - 1)!}{(j_{i_k} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{i_k} - j_{i_k} - k_1)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 2)}^{()} \sum_{j_i = j_{i_k} + 2}^n \right. \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \right. \\
 & \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{i_k} = j_s + s - 1)}^{(n-1)} \sum_{j_i = j_{i_k} + 1}^n \\
 & \sum_{(n_i = n + k_1 + 1)}^{(n-1)} \sum_{n_{i_s} = n + k_1 + k_2 - j_s + 2}^{n_i - j_s + 1} \sum_{(n_{i_k} = n + k_2 - j_{i_k} + 2)}^{(n_{i_s} + j_s - j_{i_k} - k_1)} \sum_{n_s = n - j_i + 2}^{n_{i_k} + j_{i_k} - j_i - k_2} \sum_{(i=2)}^{(n - j_i + 1)} \\
 & \left. \frac{(j_{i_k} - j_s - 1)!}{(j_{i_k} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \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} + j_s - n_{i_k} - j_{i_k})!} \cdot \\
 & \left. \frac{(n_{i_k} - n_s - 1)!}{(j_i - j_{i_k} - 1)! \cdot (n_{i_k} + j_{i_k} - n_s - j_i)!} \cdot \right.
 \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

$$\frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - s - 2 \cdot lk - lk_1)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_i - n - 2 \cdot lk - lk_1 - 1)! \cdot (n + j_{sa}^s - s - j_s)!}$$

$$D = n < n \wedge lk = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk > 0 \wedge I = 1 \wedge s = s + lk + 1 \wedge$$

$$lk_z: z = 2 \wedge lk = lk_1 + lk_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = lk + 1 \wedge s > 1 \wedge lk_2 > 0 \wedge lk_1 = 0 \wedge I = 1 \wedge$$

$$s = s + lk + 1 \wedge lk_z: z = 1 \wedge lk = lk_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-lk_2-1} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - lk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - lk_1)!}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right.$$

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+lk_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-lk_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-lk_2} \sum_{(i=2)}^{(n-j_i+1)}$$

$$\begin{aligned}
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) - \\
 & (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^{lk}-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \\
 & \frac{(3 \cdot n_{is} + 2 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - s - 2 \cdot k - k_1 - 2)!}{(3 \cdot n_{is} + 3 \cdot j_s - n_{ik} - n_s - 2 \cdot j_{ik} - n - 2 \cdot k - k_1 - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}
 \end{aligned}$$

$D = n < n \wedge k = 0 \wedge l = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge \mathbf{s} = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$\mathbf{s} = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot \\
 &\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 &(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 &\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \\
 &\frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 &\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \\
 &\left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 &\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 &\sum_{(n_i=n+\mathbb{k}+1)}^{(n-1)} \sum_{n_{i_s}=n+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+\mathbb{k}_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)}
 \end{aligned}$$

$$\frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)} \sum_{j_i=j_s+s-1} \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) +$$

$$\begin{aligned}
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+l_k+1)}^{(n-1)} \sum_{n_{i_s}=n+l_{k_1}+l_{k_2}-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+l_{k_2}-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-l_{k_1})} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-l_{k_2}} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \right) \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -
 \end{aligned}$$

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

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

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

$$D = \mathbf{n} < n \wedge \mathbb{k} = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k} > 0 \wedge I = 1 \wedge s = s + \mathbb{k} + 1 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = \mathbb{k} + 1 \wedge s > 1 \wedge \mathbb{k}_2 > 0 \wedge \mathbb{k}_1 = 0 \wedge I = 1 \wedge$$

$$s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z: z = 1 \wedge \mathbb{k} = \mathbb{k}_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$$\begin{aligned}
{}^0S_0^{DOS} &= (D - s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1} \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}-\mathbb{k}_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \\
&\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) + \\
&(D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
&\sum_{(n_i=\mathbf{n}+\mathbb{k}+1)}^{(n-1)} \sum_{n_{is}=\mathbf{n}+\mathbb{k}_1+\mathbb{k}_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=\mathbf{n}+\mathbb{k}_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-\mathbb{k}_1)} \sum_{n_s=\mathbf{n}-j_i+2}^{n_{ik}+j_{ik}-j_i-\mathbb{k}_2} \sum_{(i=2)}^{(n-j_i+1)} \\
&\left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \right) \\
&\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \\
&\frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \\
&\left(\frac{(n_s - 2)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - \mathbf{n} - 2)! \cdot (\mathbf{n} - j_i - i + 1)!} \right) +
\end{aligned}$$

$$\begin{aligned}
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{is}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \frac{(j_{ik}-j_s-1)!}{(j_{ik}-j_s-s+2)! \cdot (s-3)!} \cdot \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)! \cdot (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \\
 & \frac{(n_{ik}-n_s-1)!}{(j_i-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_s-j_i)!} \cdot \\
 & \left(\frac{(n_s-2)!}{(n_s+j_i-n-2)! \cdot (n-j_i)!} + \frac{(n_s-i-1)!}{(n_s+j_i-n-2)! \cdot (n-j_i-i+1)!} \right) - \\
 & (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+j_{sa}^k-1)}^{()} \sum_{j_i=j_{ik}+1}^{()} \\
 & \sum_{(n_i=n+k+1)}^{(n-1)} \sum_{n_{is}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-k_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-k_2}^{()} \\
 & \frac{(n_i-n_{is}-1)!}{(j_s-2)! \cdot (n_i-n_{is}-j_s+1)!} \cdot \\
 & \frac{(n_{is}+n_{ik}-n_s-s-2 \cdot k_2-k_1-2)!}{(n_{is}+n_{ik}+j_s-n_s-n-2 \cdot k_2-k_1-j_{sa}^s-2)! \cdot (n+j_{sa}^s-s-j_s)!}
 \end{aligned}$$

$$D = n < n \wedge k = 0 \wedge I = 1 \wedge s = s + 1 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k > 0 \wedge I = 1 \wedge s = s + k + 1 \wedge$$

$$k_z: z = 2 \wedge k = k_1 + k_2 \wedge j_{ik} = j_i - 1 \vee$$

$$I = k + 1 \wedge s > 1 \wedge k_2 > 0 \wedge k_1 = 0 \wedge I = 1 \wedge$$

$$s = s + k + 1 \wedge k_z: z = 1 \wedge k = k_2 \wedge j_{ik} = j_i - 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s)! \cdot \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_s+s-1}^{()}$$

$$\begin{aligned}
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}-k_2-1} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \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} - k_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik} - k_1)!} \cdot \\
 & \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \\
 & (D - s)! \cdot \left(\sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-2)}^{()} \sum_{j_i=j_{ik}+2}^n \right. \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \right. \\
 & \left. \left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) + \right. \\
 & \sum_{j_s=2}^{n-s+1} \sum_{(j_{ik}=j_s+s-1)}^{(n-1)} \sum_{j_i=j_{ik}+1}^n \\
 & \sum_{(n_i=n+k_1+1)}^{(n-1)} \sum_{n_{i_s}=n+k_1+k_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n+k_2-j_{ik}+2)}^{(n_{i_s}+j_s-j_{ik}-k_1)} \sum_{n_s=n-j_i+2}^{n_{ik}+j_{ik}-j_i-k_2} \sum_{(i=2)}^{(n-j_i+1)} \\
 & \left. \frac{(j_{ik} - j_s - 1)!}{(j_{ik} - j_s - s + 2)! \cdot (s - 3)!} \cdot \right. \\
 & \frac{(n_i - n_{i_s} - 1)!}{(j_s - 2)! \cdot (n_i - n_{i_s} - j_s + 1)!} \cdot \frac{(n_{i_s} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i_s} + j_s - n_{ik} - j_{ik})!} \cdot \\
 & \left. \frac{(n_{ik} - n_s - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_s - j_i)!} \cdot \right.
 \end{aligned}$$

$$\left(\frac{(n_s - 2)!}{(n_s + j_i - n - 2)! \cdot (n - j_i)!} + \frac{(n_s - i - 1)!}{(n_s + j_i - n - 2)! \cdot (n - j_i - i + 1)!} \right) -$$

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

$$\sum_{(n_i=n+lk+1)}^{(n-1)} \sum_{n_{is}=n+lk_1+lk_2-j_s+2}^{n_i-j_s+1} \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-lk_1)}^{()} \sum_{n_s=n_{ik}+j_{ik}-j_i-lk_2}$$

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

$$\frac{(n_{is} + n_{ik} + lk_1 - n_s - s - 2 \cdot lk - 2)!}{(n_{is} + n_{ik} + j_s + lk_1 - n_s - n - 2 \cdot lk - j_{sa}^s - 2)! \cdot (n + j_{sa}^s - s - j_s)!}$$

GÜLDÜMNA

$$D = n < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z > 1 \Rightarrow$$

$$\begin{aligned}
 {}^0S_0^{DOS} &= (D - s) \cdot \prod_{z=2}^s \sum_{(j_i)_1=2}^{(j_{ik})_3-1} \sum_{(j_{ik})_z=z}^{(j_i)_{z-1}} \sum_{(j_i)_{z+1} \vee z = s \Rightarrow s+1}^{(j_{ik})_{z+2}-1 \vee n} \\
 &\sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik})_1=(n_s)_2+(j_i)_2+\sum_{i=1}^{\mathbb{k}_i-(j_i)_1} \vee z = s \Rightarrow n+\sum_{i=1}^{s-1} \mathbb{k}_i-(j_i)_1+2}^{(n_i-(j_i)_1+1)} \\
 &\sum_{(n_{ik})_z=(n_s)_z+(j_i)_z+\sum_{i=z-1}^{\mathbb{k}_i-(j_{ik})_z} \vee z = s \Rightarrow n+\sum_{i=z-1}^{s-1} \mathbb{k}_i-(j_{ik})_z+2}^{(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2}^{\mathbb{k}_i}} \\
 &\sum_{(n_s)_z=(n_s)_{z+1}+(j_i)_{z+1}+\sum_{i=z}^{\mathbb{k}_i-(j_i)_z} \vee z = s \Rightarrow n+\sum_{i=z}^{s-1} \mathbb{k}_i-(j_i)_z+2}^{(n_{ik})_z+(j_{ik})_z-(j_i)_z-\sum_{i=z-1}^{\mathbb{k}_i}} \\
 &\frac{(D - s)!}{(D - s - (j_i)_1 + 2)!} \cdot \frac{(D - s - (j_{ik} - j_{sa}^{ik})_z)!}{(D - s - (j_i)_z + (j_{ik})_z - (j_{ik} - j_{sa}^{ik})_z + 1)!} \cdot \frac{(D - (j_i)_{z=s})!}{(D - n)!} \\
 &\frac{(n_i - (n_{ik})_1 - 1)!}{((j_i)_1 - 2)! \cdot (n_i - (n_{ik})_1 - (j_i)_1 + 1)!} \\
 &\frac{((n_{ik})_z - (n_s)_z - 1)!}{((j_i)_z - (j_{ik})_z - 1)! \cdot ((n_{ik})_z + (j_{ik})_z - (n_s)_z - (j_i)_z)!} \\
 &\frac{((n_s)_{z=s} - 1)!}{((n_s)_{z=s} + (j_i)_{z=s} - n - 1)! \cdot (n - (j_i)_{z=s})!} \\
 &(D - s) \cdot \prod_{z=2}^s \sum_{(j_i)_1=(j_{ik})_3-1}^{()} \sum_{(j_{ik})_z=(j_i)_{z-1}} \sum_{(j_i)_{z+1} \vee z = s \Rightarrow s+1}^{(n)} \\
 &\sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik})_1=n_i-(j_i)_1+1}^{()} \\
 &\sum_{(n_{ik})_z=(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2}^{\mathbb{k}_i}} \\
 &\sum_{(n_s)_z=(n_{ik})_z+(j_{ik})_z-(j_i)_z-\sum_{i=z-1}^{\mathbb{k}_i}}
 \end{aligned}$$

$$\frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{(D-s-(j_{ik}-j_{sa}^{ik})_z)!}{(D-s-(j_i)_z+(j_{ik})_z-(j_{ik}-j_{sa}^{ik})_z+1)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-n)!} \cdot \frac{(n_i-(n_{ik})_1-1)!}{((j_i)_1-2)! \cdot (n_i-(n_{ik})_1-(j_i)_1+1)!} \cdot \frac{((n_{ik})_z-(n_s)_z-1)!}{((j_i)_z-(j_{ik})_z-1)! \cdot ((n_{ik})_z+(j_{ik})_z-(n_s)_z-(j_i)_z)!} \cdot \frac{((n_s)_{z=s}-2)!}{((n_s)_{z=s}+(j_i)_{z=s}-n-2)! \cdot (n-(j_i)_{z=s})!}$$

$$D = n < n \wedge s > 1 \wedge I = \mathbb{k} + 1 \wedge s = s + \mathbb{k} + 1 \wedge \mathbb{k}_z : z > 1 \Rightarrow$$

$${}^0S_0^{DOS} = (D-s) \cdot \prod_{z=2}^s \sum_{(j_i)_1=2}^{(j_{ik})_3-1} \sum_{(j_{ik})_z=z}^{(j_i)_{z-1}} \sum_{(j_i)_{z+1} \vee z=s \Rightarrow s+1}^{(j_{ik})_{z+2}-1 \vee n} \sum_{n_i=n+\mathbb{k}+1}^{n-1} \sum_{(n_{ik})_1=(n_s)_2+(j_i)_2+\sum_{i=1}^{\mathbb{k}_i-(j_i)_1} \mathbb{k}_i-(j_i)_1 \vee z=s \Rightarrow n+\sum_{i=1}^{s-1} \mathbb{k}_i-(j_i)_1+2}^{(n_i-(j_i)_1+1)} \sum_{(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_{ik})_z-\sum_{i=z-2}^{\mathbb{k}_i} (n_{ik})_z=(n_s)_z+(j_i)_z+\sum_{i=z-1}^{\mathbb{k}_i-(j_{ik})_z} \vee z=s \Rightarrow n+\sum_{i=z-1}^{s-1} \mathbb{k}_i-(j_{ik})_z+2}^{(n_{ik})_z+(j_{ik})_z-(j_i)_z-\sum_{i=z-1}^{\mathbb{k}_i} (n_s)_z=(n_s)_{z+1}+(j_i)_{z+1}+\sum_{i=z}^{\mathbb{k}_i-(j_i)_z} \vee z=s \Rightarrow n+\sum_{i=z}^{s-1} \mathbb{k}_i-(j_i)_z+2} \sum_{i=2}^{n-(j_i)_{z=s}+1} \frac{(D-s)!}{(D-s-(j_i)_1+2)!} \cdot \frac{(D-s-(j_{ik}-j_{sa}^{ik})_z)!}{(D-s-(j_i)_z+(j_{ik})_z-(j_{ik}-j_{sa}^{ik})_z+1)!} \cdot \frac{(D-(j_i)_{z=s})!}{(D-n)!} \cdot \frac{(n_i-(n_{ik})_1-1)!}{((j_i)_1-2)! \cdot (n_i-(n_{ik})_1-(j_i)_1+1)!} \cdot \frac{((n_{ik})_z-(n_s)_z-1)!}{((j_i)_z-(j_{ik})_z-1)! \cdot ((n_{ik})_z+(j_{ik})_z-(n_s)_z-(j_i)_z)!} \cdot \left(\frac{((n_s)_{z=s}-2)!}{((n_s)_{z=s}+(j_i)_{z=s}-n-2)! \cdot (n-(j_i)_{z=s})!} + \frac{((n_s)_{z=s}-i-1)!}{((n_s)_{z=s}+(j_i)_{z=s}-n-2)! \cdot (n-(j_i)_{z=s}-i+1)!} \right) -$$

$$\begin{aligned}
 & (D - s) \cdot \prod_{z=2}^s \sum_{(j_i)_1=(j_{ik})_{3-1}}^{(\quad)} \sum_{(j_{ik})_z=(j_i)_{z-1}} \sum_{(j_i)_{z=z+1} \forall z=s \Rightarrow s+1}^{(n)} \\
 & \sum_{n_i=n+k+1}^{n-1} \sum_{((n_{ik})_1=n_i-(j_i)_1+1)}^{(\quad)} \\
 & \sum_{(n_{ik})_z=(n_{ik})_{z-1}+(j_{ik})_{z-1}-(j_i)_{z-1}-\sum_{i=z-2}^k k_i} \\
 & \sum_{((n_s)_z=(n_{ik})_z+(j_{ik})_z-(j_i)_{z-1}-\sum_{i=z-1}^k k_i)}^{(\quad)} \\
 & \frac{(D - s)!}{(D - s - (j_i)_1 + 2)!} \cdot \frac{(D - s - (j_{ik} - j_{sa}^{ik})_z)!}{(D - s - (j_i)_z + (j_{ik})_z - (j_{ik} - j_{sa}^{ik})_z + 1)!} \cdot \frac{(D - (j_i)_{z=s})!}{(D - n)!} \\
 & \frac{(n_i - (n_{ik})_1 - 1)!}{((j_i)_1 - 2)! \cdot (n_i - (n_{ik})_1 - (j_i)_1 + 1)!} \\
 & \frac{((n_{ik})_z - (n_s)_z - 1)!}{((j_i)_z - (j_{ik})_z - 1)! \cdot ((n_{ik})_z + (j_{ik})_z - (n_s)_z - (j_i)_z)!} \\
 & \frac{((n_s)_{z=s} - 2)!}{((n_s)_{z=s} + (j_i)_{z=s} - n - 2)! \cdot (n - (j_i)_{z=s})!}
 \end{aligned}$$

BAĞIMSIZ DURUMLA BAŞLAYAN DAĞILIMLARDA BİR BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİK BULUNMAMA OLASILIĞI

Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde $\{1, 0\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısı; bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığın $(D - s)$ çarpımından, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılığın çıkarılmasına eşit olur. Simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, kalan düzgün olmayan simetrik bulunmama olasılığı için,

$${}^0S_0^{DOS,B} = {}_{0,1t}S_1^1 \cdot (D - s) - {}^0S_0^{DOS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bir bağımlı durumla başlayıp bir bağımsız durumla bittiğinde; bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardan, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısına **bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı ${}^0S_0^{DOS,B}$ ile gösterilecektir.

BAĞIMSIZ DURUMLA BAŞLAYAN DAĞILIMLARDA BAĞIMLI-BİR BAĞIMSIZ DURUMLU KALAN DÜZGÜN OLMAYAN SİMETRİK BULUNMAMA OLASILIĞI

Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde $\{1, 2, 3, 4, 5, \mathbf{0}\}$ veya $\{1, 2, \mathbf{0}, \mathbf{0}, \mathbf{0}, 3, 4, \mathbf{0}, \mathbf{0}, 5, \mathbf{0}\}$, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısı; bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı durumun bağımsız tek simetrik olasılığın $(D - s)$ çarpımından, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik olasılığın çıkarılmasına eşit olur. Simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde, bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlardan, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, kalan düzgün olmayan simetrik bulunmama olasılığı için,

$${}^0S_0^{DOS,B} = {}_{0,1t}S_1^1 \cdot (D - s) - {}^0S_0^{DOS}$$

eşitliği elde edilir. Bu eşitliğe bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılık eşitliği denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli dağılımlarda, simetri bağımlı durumla başlayıp, bir bağımsız durumla bittiğinde; bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardan, düzgün olmayan simetrik durumların bulunmadığı dağılımların sayısına ***bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı*** denir. Bağımlı ve bir bağımsız olasılıklı farklı dizilimli bağımlı-bir bağımsız durumlu bağımsız kalan düzgün olmayan simetrik bulunmama olasılığı ${}^0S_0^{DOS,B}$ ile gösterilecektir.

BÖLÜM D KALAN SİMETRİK OLASILIK

ÖZET

KALAN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, simetrik olasılıklar; tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DS} = S^{DST} \cdot (D - s)$$

veya

$${}_0S^{DS} = {}_0S^{DST} \cdot (D - s)$$

veya

$${}^0S^{DS} = {}^0S^{DST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, simetrik olasılıklar; aynı dağılımlardaki tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DS} = S_0^{DST} \cdot (D - s)$$

veya

$${}_0S_0^{DS} = {}_0S_0^{DST} \cdot (D - s)$$

veya

$${}^0S_0^{DS} = {}^0S_0^{DST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, simetrik olasılıklar; aynı dağılımlardaki tek kalan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DS} = S_D^{DST} \cdot (D - s)$$

veya

$${}_0S_D^{DS} = {}_0S_D^{DST} \cdot (D - s)$$

veya

$${}^0S_D^{DS} = {}^0S_D^{DST} \cdot (D - s)$$

KALAN DÜZGÜN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün simetrik olasılıklar; tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DSS} = S^{DSSST} \cdot (D - s)$$

veya

$${}_0S^{DSS} = {}_0S^{DSSST} \cdot (D - s)$$

veya

$${}^0S^{DSS} = {}^0S^{DSSST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DSS} = S_0^{DSSST} \cdot (D - s)$$

veya

$${}_0S_0^{DSS} = {}_0S_0^{DSSST} \cdot (D - s)$$

veya

$${}^0S_0^{DSS} = {}^0S_0^{DSSST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizilimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DSS} = S_D^{DSSST} \cdot (D - s)$$

veya

$${}_0S_D^{DSS} = {}_0S_D^{DSSST} \cdot (D - s)$$

veya

$${}^0S_D^{DSS} = {}^0S_D^{DSSST} \cdot (D - s)$$

KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIKLAR

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan ve bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S^{DOS} = S^{DOST} \cdot (D - s)$$

veya

$${}_0S^{DOS} = {}_0S^{DOST} \cdot (D - s)$$

veya

$${}^0S^{DOS} = {}^0S^{DOST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumunda simetride bulunmayan bağımlı durumlar bulunan dağılımlardaki, düzgün olmayan simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_0^{DOS} = S_0^{DOST} \cdot (D - s)$$

veya

$${}_0S_0^{DOS} = {}_0S_0^{DOST} \cdot (D - s)$$

veya

$${}^0S_0^{DOS} = {}^0S_0^{DOST} \cdot (D - s)$$

- Bağımlı ve bir bağımsız olasılıklı farklı dizimli olasılık dağılımlarından, simetride bulunmayan bağımlı durumlarla başlayan dağılımlardaki, düzgün olmayan simetrik olasılıklar; aynı dağılımlardaki tek kalan düzgün olmayan simetrik olasılıkların $(D - s)$ ile çarpımına eşit olur.

$$S_D^{DOS} = S_D^{DOST} \cdot (D - s)$$

veya

$${}_0S_D^{DOS} = {}_0S_D^{DOST} \cdot (D - s)$$

veya

$${}^0S_D^{DOS} = {}^0S_D^{DOST} \cdot (D - s)$$

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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 aynı cilt numaraları ile soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt, bağımlı ve bir bağımsız olasılıklı farklı dizilimli bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlu simetrisinin bağımsız durumla başlayan dağılımlardaki kalan düzgün olmayan simetrik olasılığı ve kalan düzgün olmayan simetrik bulunmama olasılıklarının tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimli Bir Bağımlı-Bir Bağımsız ve Bağımlı-Bir Bağımsız Durumlu Simetrisinin Bağımsız Durumla Başlayan Dağılımlardaki Kalan Düzgün Olmayan Simetrik Olasılık kitabında, bağımlı durum sayısı, bağımlı olay sayısına eşit farklı dizilimli dağılımlar ve bir bağımsız olasılıklı dağılımla elde edilebilecek yeni olasılık dağılımlarından, bağımsız durumla başlayıp sonraki ilk bağımlı durumda simetride bulunmayan bağımlı durumlar bulunan dağılımlarda, bir bağımlı-bir bağımsız ve bağımlı-bir bağımsız durumlardan oluşan simetrisinin; düzgün olmayan simetrik olasılıkları ve düzgün olmayan simetrik bulunmama olasılıklarının tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin bu cildinde verilen kalan düzgün olmayan simetrik olasılık eşitlikleri teorik yöntemle üretilmiştir. Tanım ve eşitliklerin üretilmesinde dış kaynak kullanılmamıştır.

GÜLDÜM