

$$\begin{aligned}
& \frac{1/3i\langle 12 \rangle^2 [12] [13]^2 \langle 23 \rangle [35] \langle 31+2 \rangle [5]^2}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^3 \langle 31+2 \rangle [4] \langle 31+2 \rangle [6]} + \\
& \frac{-1/3i\langle 12 \rangle [12] [13] \langle 23 \rangle^2 [35]^2 \langle 12+3 \rangle [5] \langle 31+2 \rangle [5]}{\langle 13 \rangle [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^3 \langle 31+2 \rangle [6]} + \\
& \frac{-1/2i\langle 12 \rangle^2 [13]^2 [14] \langle 31+2 \rangle [5]^3}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^2 \langle 31+2 \rangle [4]^2 \langle 31+2 \rangle [6]} + \\
& \frac{\langle 12 \rangle [13]^2 \langle 31+2 \rangle [5]^2 (-5/6i\langle 12 \rangle [15] + 1i\langle 23 \rangle [35])}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^2 \langle 31+2 \rangle [4] \langle 31+2 \rangle [6]} + \\
& \frac{1/2i\langle 12 \rangle [13] \langle 23 \rangle^2 [25] [35] \langle 12+3 \rangle [5] \langle 31+2 \rangle [5]}{\langle 13 \rangle^2 [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^2 \langle 31+2 \rangle [6]} + \\
& \frac{[13] \langle 23 \rangle [35] \langle 12+3 \rangle [5] \langle 31+2 \rangle [5] (5/3i\langle 12 \rangle [15] - 5/6i\langle 23 \rangle [35])}{\langle 13 \rangle [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3]^2 \langle 31+2 \rangle [6]} + \\
& \frac{-1i[13] \langle 23 \rangle^2 [45]^2 \langle 31+2 \rangle [5] s_{123}^2}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [4]^3 \langle 31+2 \rangle [6]} + \\
& \frac{\langle 23 \rangle [12] \langle 31+2 \rangle [5] (-1/2i\langle 12 \rangle^2 [13] [15] [45] \dots \langle 3 \text{ terms} \rangle) \dots + 3i\langle 23 \rangle^2 [34] [35]^2}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [4]^2 \langle 31+2 \rangle [6]} + \\
& \frac{-1/2i\langle 12 \rangle [13] [15] \langle 31+2 \rangle [5] \langle 21+3 \rangle [5]}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [4] \langle 31+2 \rangle [6]} + \\
& \frac{1i\langle 12 \rangle^2 \langle 23 \rangle^3 [25]^3 [35]}{\langle 13 \rangle^3 [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [6]} + \\
& \frac{\langle 12 \rangle \langle 23 \rangle [25] [35] \langle 31+2 \rangle [5] (-7/2i\langle 12 \rangle [15] + 1/2i\langle 23 \rangle [35])}{\langle 13 \rangle^2 [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [6]} + \\
& \frac{\langle 23 \rangle [25] [35] \langle 21+3 \rangle [5] (-5/6i\langle 12 \rangle [15] + 1/3i\langle 23 \rangle [35])}{\langle 13 \rangle [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [6]} + \\
& \frac{[13] [35] \langle 31+2 \rangle [5] (13/3i\langle 12 \rangle^2 [15]^2 - 31/6i\langle 12 \rangle [15] \langle 23 \rangle [35] + 11/6i\langle 23 \rangle^2 [35]^2)}{[45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [3] \langle 31+2 \rangle [6] s_{123}} + \\
& \frac{\langle 12 \rangle [12] \langle 23+4 \rangle [1] \langle 41+2 \rangle [3] \langle 61+2 \rangle [5] s_{134} (15/128i\langle 12 \rangle [12] + 5/64i\langle 13 \rangle [13] + 15/64i\langle 14 \rangle [14] + 5/32i\langle 15 \rangle [15])}{\langle 13+4 \rangle [2] \langle 31+2 \rangle [4] \langle 51+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{\langle 12 \rangle [12] \langle 23+4 \rangle [1] \langle 41+2 \rangle [3] \langle 61+2 \rangle [5] s_{234} (15/128i\langle 12 \rangle [12] + 5/64i\langle 13 \rangle [13] + 15/64i\langle 14 \rangle [14] + 5/32i\langle 15 \rangle [15])}{\langle 13+4 \rangle [2] \langle 31+2 \rangle [4] \langle 51+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{1/48i[12] \langle 16 \rangle^2 \langle 23+4 \rangle [1] \langle 41+2 \rangle [3] \langle 61+2 \rangle [5] \Omega_{135}}{\langle 56 \rangle \langle 13+4 \rangle [2] \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}^2} + \\
& \frac{[13] (-17/12i\langle 12 \rangle^2 [12]^2 [13] \langle 16 \rangle^2 [23] \langle 26 \rangle \dots \langle 43 \text{ terms} \rangle) \dots + 7/8i[13] \langle 16 \rangle^2 \langle 23 \rangle [23]^2 \langle 26 \rangle \langle 34 \rangle [34]}{[34] [56] \langle 13+4 \rangle [2] \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}} + \\
& \frac{-1/4i[14] \langle 23 \rangle^2 [45] \langle 61+2 \rangle [5] s_{123} \Omega_{351}}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [4]^3 \langle 31+2 \rangle [6] \Delta_{135}} + \\
& \frac{1i[15] \langle 23 \rangle^2 [45]^2 s_{123}^2}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [4]^3 \langle 31+2 \rangle [6]} + \\
& \frac{3/16i\langle 12 \rangle [12] \langle 23 \rangle [45] \langle 23+4 \rangle [1] \langle 35+6 \rangle [3] \langle 61+2 \rangle [5] \Omega_{351}}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [4]^2 \langle 31+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{\langle 23 \rangle \langle 61+2 \rangle [5] (-7/8i\langle 12 \rangle^2 [12] \langle 14 \rangle [14]^2 [15] \dots \langle 15 \text{ terms} \rangle) \dots + 1/4i[13] \langle 23 \rangle^3 [23] [25] \langle 34 \rangle}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [4]^2 \langle 31+2 \rangle [6] \Delta_{135}} + \\
& \frac{-1/48i\langle 12 \rangle^2 [15]^3 s_{123}^2 \Omega_{351}}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{\langle 12 \rangle \langle 23 \rangle 32i\langle 12 \rangle^3 [12]^2 [13] \langle 15 \rangle [15]^3 \langle 36 \rangle \dots \langle 248 \text{ terms} \rangle \dots - 5/8i[12] [16] \langle 23 \rangle [25]^2 \langle 26 \rangle^3 \langle 36 \rangle \langle 36 \rangle^2}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{\langle 12 \rangle \Pi_{351} (-1/16i\langle 12 \rangle^3 [12]^3 [15]^2 \langle 26 \rangle \dots \langle 124 \text{ terms} \rangle) \dots + 1i[12] [16] \langle 23 \rangle [23] \langle 26 \rangle^2 [35] \langle 36 \rangle [56]}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{-9i\langle 12 \rangle^4 [12]^2 [15]^3 \dots \langle 149 \text{ terms} \rangle \dots - 1/4i[15] \langle 23 \rangle^2 \langle 24 \rangle^2 [25]^2 [34]^2}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}} + \\
& \frac{-1i\langle 12 \rangle^2 \langle 23 \rangle^2 [25]^3 \langle 21+3 \rangle [5]}{\langle 13 \rangle^3 [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [6] s_{123}} + \\
& \frac{\langle 12 \rangle \langle 23 \rangle [25]^2 \langle 21+3 \rangle [5] (-7/2i\langle 12 \rangle [15] + 1/2i\langle 23 \rangle [35])}{\langle 13 \rangle^2 [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [6] s_{123}} + \\
& \frac{[25] \langle 21+3 \rangle [5] (-13/3i\langle 12 \rangle^2 [15]^2 + 5/3i\langle 12 \rangle [15] \langle 23 \rangle [35] - 1/3i\langle 23 \rangle^2 [35]^2)}{\langle 13 \rangle [45] [56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [6] s_{123}} + \\
& \frac{-719/32i\langle 12 \rangle^3 [12]^3 [15] \langle 24 \rangle \langle 26 \rangle [35] \dots \langle 312 \text{ terms} \rangle \dots + 11/4i[16] \langle 24 \rangle [24] [25] \langle 26 \rangle^3 [36] \langle 46 \rangle [56]}{\langle 12+3 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}^2} + \\
& \frac{25i\langle 12 \rangle^2 [13] \langle 14 \rangle [15]^3 \dots \langle 13 \text{ terms} \rangle \dots + 5/4i[15] \langle 23 \rangle \langle 24 \rangle^2 [25] [34] [35]}{[56] \langle 12+3 \rangle [4] \langle 31+2 \rangle [6] \Delta_{135}} + \\
& (123456 \rightarrow \overline{216543}) + \\
& \frac{-1/4i\langle 14 \rangle \langle 16 \rangle^2 [23]^2 [25] \langle 23+4 \rangle [1] \Omega_{135}}{\langle 13+4 \rangle [2]^3 \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}} + \\
& \frac{1i\langle 16 \rangle^3 [23]^3 \langle 23+4 \rangle [1] s_{234}}{[34] [56] \langle 13+4 \rangle [2]^3 \langle 12+3 \rangle [4] \langle 51+6 \rangle [2]} + \\
& \frac{-3/16i\langle 14 \rangle \langle 16 \rangle^2 [23]^2 [25] \langle 23+4 \rangle [1]^2 \Omega_{135}}{\langle 13+4 \rangle [2]^2 \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}^2} + \\
& \frac{\langle 16 \rangle [23] \langle 23+4 \rangle [1] (-3/8i\langle 12 \rangle [12]^2 \langle 14 \rangle \langle 16 \rangle [35] \dots \langle 26 \text{ terms} \rangle) \dots + 3/8i\langle 16 \rangle [23] \langle 24 \rangle^2 [24] [25]}{\langle 13+4 \rangle [2]^2 \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}} + \\
& \frac{\langle 16 \rangle^2 [23]^2 \langle 23+4 \rangle [1] (-1/2i[13] \langle 16 \rangle - 4i[23] \langle 26 \rangle + 9/2i[34] \langle 46 \rangle)}{[34] [56] \langle 13+4 \rangle [2]^2 \langle 12+3 \rangle [4] \langle 51+6 \rangle [2]} + \\
& \frac{\langle 12 \rangle [12] \langle 23+4 \rangle [1] \langle 41+2 \rangle [3] \langle 61+2 \rangle [5] \Pi_{135} \Pi_{351} \Pi_{513} (5/256i s_{134} + 5/256i s_{234})}{\langle 13+4 \rangle [2] \langle 31+2 \rangle [4] \langle 51+2 \rangle [6] \Delta_{135}^3} + \\
& \frac{9/8i\langle 13 \rangle^4 [13]^5 \langle 16 \rangle [35] \langle 46 \rangle \dots \langle 298 \text{ terms} \rangle \dots - 7/8i\langle 14 \rangle [14]^3 \langle 16 \rangle^2 [36]^2 \langle 46 \rangle^3 [56]}{\langle 13+4 \rangle [2] \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}^2} + \\
& \frac{\Pi_{135} (-441/16i\langle 13 \rangle^3 [13]^4 \langle 16 \rangle [35] \langle 46 \rangle \dots \langle 163 \text{ terms} \rangle) \dots + 23/48i[14]^2 \langle 16 \rangle^2 [36]^2 \langle 46 \rangle^3 [56]}{\langle 13+4 \rangle [2] \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}^2} + \\
& \frac{133/6i\langle 13 \rangle^2 [13]^3 \langle 16 \rangle [35] \langle 46 \rangle \dots \langle 173 \text{ terms} \rangle \dots + 1/8i[35]^2 \langle 46 \rangle [56]^3 [56]^2}{\langle 13+4 \rangle [2] \langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}} + \\
& \frac{2613/32i\langle 12 \rangle^3 [12]^2 [13]^2 [25] \langle 26 \rangle \langle 46 \rangle \dots \langle 683 \text{ terms} \rangle \dots - 53/48i[15] \langle 26 \rangle [34] [36] \langle 46 \rangle^4 [46]^2}{\langle 12+3 \rangle [4] \langle 51+6 \rangle [2] \Delta_{135}^2}
\end{aligned}$$