

$$\begin{aligned}
& \frac{3/2[23]\langle 24 \rangle \langle 26 \rangle \langle 6|1+5|2]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|2] s_{234}} + \\
& \frac{-21/2[23]\langle 24 \rangle^2 [24][35]\langle 36 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] \langle 3|2+4|3] s_{234}} + \\
& \frac{6[15][23]^2 \langle 24 \rangle \langle 36 \rangle}{\langle 23 \rangle \langle 56 \rangle [56] \langle 3|2+4|3] s_{234}} + \\
& \frac{-15\langle 46 \rangle \langle 6|1+5|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle s_{234}} + \\
& \frac{15\langle 14 \rangle [15][34]\langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] s_{234}} + \\
& \frac{-9\langle 14 \rangle [15][23]\langle 26 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] s_{234}} + \\
& \frac{-21/2[23]\langle 24 \rangle \langle 6|1+3|5]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] s_{234}} + \\
& \frac{1/4[12]\langle 13 \rangle [34]\langle 6|1+2|5 \rangle (s_{123} - s_{124})}{\langle 12 \rangle \langle 3|1+2|4]^2 \Delta_{12|34|56}} + \\
& \frac{1[24][35]\langle 3|1+2|5]}{\langle 12 \rangle [56] \langle 3|1+2|4]^2} + \\
& \frac{3/16[12]\langle 13 \rangle [34]\langle 4|1+2|3 \rangle \langle 6|1+2|5 \rangle (s_{123} - s_{124})}{\langle 12 \rangle \langle 3|1+2|4] \Delta_{12|34|56}^2} + \\
& \frac{[13](s_{234} - s_{134})(s_{13} - s_{24})(-1/2[24]\langle 26 \rangle \langle 46 \rangle + 3/8[34]\langle 36 \rangle \langle 46 \rangle - 1/2[35]\langle 36 \rangle \langle 56 \rangle)}{\langle 12 \rangle \langle 56 \rangle \langle 2|3+4|1] \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{7/8[15][35] s_{34} (s_{13} - s_{24})(s_{234} - s_{134})}{\langle 12 \rangle [56] \langle 2|3+4|1] \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{\langle 46 \rangle [24](-1[24][24][34]\langle 46 \rangle \dots \langle 3 \text{ terms} \rangle \dots + 1[13][13]^2 \langle 16 \rangle)}{\langle 12 \rangle \langle 56 \rangle \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{\langle 46 \rangle (s_{12} - s_{34})(-1/2[23][24]\langle 26 \rangle + 3/8[23][34]\langle 36 \rangle + 1/2[24][34]\langle 46 \rangle)}{\langle 12 \rangle \langle 56 \rangle \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{(s_{12} - s_{34})(5/2[24][34][35]^2 \dots \langle 4 \text{ terms} \rangle \dots - 17/8[23]\langle 34 \rangle [35][45])}{\langle 12 \rangle [56] \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{-7/4[24][35]\langle 46 \rangle^2 [46] \dots \langle 19 \text{ terms} \rangle \dots - 9/8[24][35]\langle 46 \rangle \langle 56 \rangle [56]}{\langle 12 \rangle \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{(s_{34} - s_{56})(-5/8[24][35]\langle 46 \rangle \dots \langle 3 \text{ terms} \rangle \dots - 1/4[25][35]\langle 56 \rangle)}{\langle 12 \rangle \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{-3/4[13][23][24]\langle 36 \rangle \langle 46 \rangle}{\langle 56 \rangle \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{[25]^2 (7/4[13]\langle 35 \rangle [35] + 7/4[13]\langle 36 \rangle [36] + 7/4[14][35]\langle 45 \rangle + 7/4[14][36]\langle 46 \rangle)}{[56] \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{[35][12][25](15/8\langle 35 \rangle [35] + 15/8\langle 36 \rangle [36])}{[56] \langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{-3/16[12][23][35]\langle 36 \rangle \dots \langle 5 \text{ terms} \rangle \dots + 1/4[12][25][35]\langle 56 \rangle}{\langle 3|1+2|4] \Delta_{12|34|56}} + \\
& \frac{7/2\langle 34 \rangle [34]^2 \langle 36 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 3|5+6|3] \langle 3|1+2|4]} + \\
& \frac{7/2\langle 34 \rangle^2 [34][35][45]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 3|5+6|3] \langle 3|1+2|4]} + \\
& \frac{2[35]\langle 36 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 3|1+2|4]} + \\
& \frac{-7/2[34]\langle 36 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 3|1+2|4]} + \\
& \frac{[35](1[23][25] - 11/2[34][45])}{\langle 12 \rangle \langle 23 \rangle [56] \langle 3|1+2|4]} + \\
& \frac{3/8[12]\langle 14 \rangle [34]\langle 4|1+2|3 \rangle \langle 6|1+2|5]}{\langle 12 \rangle \Delta_{12|34|56}^2} + \\
& \frac{-1/2[13][35]\langle 46 \rangle (s_{234} - s_{134})}{\langle 12 \rangle \langle 2|3+4|1] \Delta_{12|34|56}} + \\
& \frac{\langle 46 \rangle [13](s_{234} - s_{134})(3/8[34]\langle 46 \rangle + 1/2[23]\langle 26 \rangle)}{\langle 12 \rangle \langle 56 \rangle \langle 2|3+4|1] \Delta_{12|34|56}} + \\
& \frac{\langle 46 \rangle [23](13/8[34]\langle 46 \rangle - 7/4[23]\langle 26 \rangle)}{\langle 12 \rangle \langle 56 \rangle \Delta_{12|34|56}} + \\
& \frac{1[23]\langle 24 \rangle \langle 2|1+6|5 \rangle \langle 6|1+5|2]}{\langle 12 \rangle \langle 23 \rangle \langle 1|5+6|1] \langle 2|3+4|2]^2} + \\
& \frac{1/2[23]\langle 24 \rangle \langle 26 \rangle [56] \langle 6|1+5|2]}{\langle 12 \rangle \langle 23 \rangle \langle 1|5+6|1] \langle 2|3+4|2]^2} + \\
& \frac{-1/2[23]\langle 24 \rangle [25]\langle 56 \rangle \langle 2|1+6|5]}{\langle 12 \rangle \langle 23 \rangle \langle 1|5+6|1] \langle 2|3+4|2]^2} + \\
& \frac{-451/36[23]\langle 24 \rangle \langle 26 \rangle \langle 6|1+5|2]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|2]^2} + \\
& \frac{1/2[23]\langle 24 \rangle [25]\langle 2|1+6|5]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|2]^2} + \\
& \frac{-3/2[15]\langle 16 \rangle [23]\langle 24 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{-3/2\langle 24 \rangle \langle 6|1+5|2 \rangle \langle 6|1+4|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{4\langle 24 \rangle [35]\langle 6|1+5|2]}{\langle 12 \rangle \langle 23 \rangle \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{1/2[23]\langle 24 \rangle \langle 6|1+2|5]}{\langle 12 \rangle \langle 23 \rangle \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{-2\langle 26 \rangle [34]\langle 46 \rangle \langle 4|1+3|2]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{-7/2\langle 24 \rangle [25][34]\langle 4|1+6|5]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{-2\langle 24 \rangle^2 [25]^2 [34]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|2] \langle 2|5+6|2]} + \\
& \frac{-3/2[13]\langle 26 \rangle \langle 34 \rangle \langle 6|1+2|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|1] \langle 2|3+4|2]} + \\
& \frac{-7/2[13]\langle 26 \rangle \langle 34 \rangle [34]\langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|1] \langle 2|3+4|2]} + \\
& \frac{\langle 24 \rangle [15](7/2\langle 14 \rangle [14][35] - 2[13]\langle 14 \rangle [45] + 3/2[13][13][35])}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|1] \langle 2|3+4|2]} + \\
& \frac{-1/2\langle 16 \rangle [23]\langle 46 \rangle \langle 2|3+4|1]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 1|5+6|1] \langle 2|3+4|2]} + \\
& \frac{2\langle 16 \rangle [23]\langle 26 \rangle \langle 4|2+3|1]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 1|5+6|1] \langle 2|3+4|2]} + \\
& \frac{-3/2\langle 14 \rangle [15][23]\langle 2|1+6|5]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 1|5+6|1] \langle 2|3+4|2]} + \\
& \frac{-295/12[23]\langle 26 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|2]} + \\
& \frac{-3/2[35]\langle 4|1+3|5]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|2]} + \\
& \frac{-21/2\langle 24 \rangle^2 [25]^2 [34]}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|5+6|2]^2} + \\
& \frac{-7/2[13]\langle 26 \rangle \langle 34 \rangle [34]\langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|1] \langle 2|5+6|2]} + \\
& \frac{[13]\langle 24 \rangle [15](-7/2\langle 14 \rangle [45] - 7/2[13][35])}{\langle 12 \rangle \langle 23 \rangle [56] \langle 2|3+4|1] \langle 2|5+6|2]} + \\
& \frac{-7/2[25]\langle 26 \rangle \langle 4|1+2|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] \langle 2|5+6|2]} + \\
& \frac{-7/2\langle 46 \rangle \langle 6|1+5|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|5+6|2]} + \\
& \frac{17/2[23]\langle 26 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|5+6|2]} + \\
& \frac{3/2[13]\langle 14 \rangle [25]\langle 26 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] \langle 2|5+6|2]} + \\
& \frac{21/2\langle 34 \rangle^2 [34][35]^2}{\langle 12 \rangle \langle 23 \rangle [56] \langle 3|5+6|3]^2} + \\
& \frac{-9/2[13]\langle 34 \rangle [35]\langle 36 \rangle \langle 1|2+4|3]}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] \langle 3|2+4|3] \langle 3|5+6|3]} + \\
& \frac{6[13]\langle 14 \rangle \langle 34 \rangle [34][35]\langle 36 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56] \langle 3|2+4|3] \langle 3|5+6|3]} + \\
& \frac{2[13]\langle 26 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle \langle 2|3+4|1]} + \\
& \frac{-19/2[35]\langle 46 \rangle}{\langle 12 \rangle \langle 23 \rangle \langle 56 \rangle [56]}
\end{aligned}$$