

$$\begin{aligned}
& \frac{-15/4[12]\langle 24 \rangle^2 \langle 26 \rangle [24][25] \dots \langle 7 \text{ terms} \rangle \dots -3/4[12]\langle 24 \rangle \langle 26 \rangle [23]\langle 23 \rangle [25]}{\langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{[35](s_{124}-s_{134})(-6[12]\langle 46 \rangle \langle 23 \rangle +27/4[34][13]\langle 36 \rangle +15/4[34]\langle 46 \rangle [14])}{\langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{-3/4\langle 36 \rangle \langle 2|3+4|1 \rangle \langle 46 \rangle (s_{23}-s_{14})[23]}{\langle 56 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle^2} + \\
& \frac{9/8\langle 4|2+3|1 \rangle \langle 3|1+4|2 \rangle \langle 26 \rangle (s_{23}-s_{56})[25]}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{-9/8\langle 4|2+3|1 \rangle [14]\langle 3|1+4|2 \rangle \langle 26 \rangle [25]\langle 14 \rangle}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{9/4\langle 46 \rangle \langle 34 \rangle \langle 3|1+4|2 \rangle [14][35](s_{23}-s_{56})}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{[14]\langle 46 \rangle \langle 3|1+4|2 \rangle [35]\langle 14 \rangle (-9/4[34][14]+9/2[12]\langle 23 \rangle)}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{\langle 34 \rangle (-3/2\langle 36 \rangle [13][25]-15/4[14]\langle 46 \rangle [25]-15/2[35]\langle 36 \rangle [12])}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}} + \\
& \frac{3/2\langle 36 \rangle \langle 3|1+4|2 \rangle [15]\langle 24 \rangle}{\langle 23 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{3/2\langle 34 \rangle (s_{14}-s_{56})[15]\langle 36 \rangle}{\langle 23 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{3/2\langle 3|5+6|3 \rangle \langle 36 \rangle [12]\langle 46 \rangle}{\langle 56 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{3/4[14]\langle 3|1+4|2 \rangle \langle 46 \rangle^2}{\langle 56 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& (123456 \rightarrow \overline{432165}) + \\
& \frac{12[24]^3[13]\langle 26 \rangle^2}{[34]^3 \langle 56 \rangle s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{[13][24]\langle 36 \rangle (-12\langle 16 \rangle [14]-17[24]\langle 26 \rangle)}{[34]^2 \langle 56 \rangle s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{-17[24]^2[14]\langle 26 \rangle \langle 46 \rangle}{[34]^2 \langle 56 \rangle s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{-12[24]^2[12]\langle 26 \rangle^2}{[34]^2 \langle 56 \rangle s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{[45][24](12[45]\langle 34 \rangle [13]-12[35][12]\langle 23 \rangle -12\langle 13 \rangle [13][15])}{[34]^2 [56] s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 36 \rangle [24](-12\langle 36 \rangle [13]+5[12]\langle 26 \rangle)}{[34]\langle 56 \rangle s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{17[24]\langle 34 \rangle [45][15]}{[34][56] s_{234} \langle 2|1+3|4 \rangle} + \\
& \frac{-18[35]^2[14](s_{13}-s_{24})\langle 24 \rangle}{[34][56] \langle 2|1+4|3 \rangle^3} + \\
& \frac{\langle 26 \rangle (23[45]\langle 34 \rangle [13] \dots \langle 5 \text{ terms} \rangle \dots +15[14]\langle 14 \rangle [15])}{\langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{-12[35][14]\langle 36 \rangle \langle 24 \rangle}{\langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{[45][13]\langle 26 \rangle (-8[14]\langle 14 \rangle -17\langle 13 \rangle [13])}{[34] \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 16 \rangle [13][14]\langle 26 \rangle (8\langle 13 \rangle [13]+8[14]\langle 14 \rangle)}{[34]\langle 56 \rangle \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{[14][35](17[35]\langle 13 \rangle [13]\langle 23 \rangle +17[24][45]\langle 24 \rangle^2)}{[34][56] \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 26 \rangle (-8[24]\langle 36 \rangle [13]\langle 24 \rangle \dots \langle 4 \text{ terms} \rangle \dots +8\langle 36 \rangle [12][34]\langle 24 \rangle)}{\langle 56 \rangle \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 23 \rangle [35](-17[14]\langle 24 \rangle [25]-9[45]\langle 34 \rangle [13]+8[45][12]\langle 24 \rangle)}{[56] \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{[13][45](-3\langle 14 \rangle [15]-3[25]\langle 24 \rangle)}{[34][56] \langle 2|1+4|3 \rangle^2} + \\
& \frac{26[35]\langle 34 \rangle [15]}{[56] \langle 2|1+4|3 \rangle^2} + \\
& \frac{-8[45]\langle 36 \rangle [13]\langle 23 \rangle}{\langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle^2} + \\
& \frac{[45][14](7[24][45]\langle 24 \rangle^2 +7[35]\langle 13 \rangle [13]\langle 23 \rangle)}{[34][56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle^2} + \\
& \frac{[45]\langle 23 \rangle (4[45]\langle 34 \rangle [13]-4[35][12]\langle 23 \rangle +4[15][12]\langle 12 \rangle -7\langle 13 \rangle [13][15])}{[56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle^2} + \\
& \frac{[24][13]\langle 26 \rangle (-8[24]\langle 26 \rangle +25\langle 16 \rangle [14])}{[34]^2 \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{29\langle 16 \rangle^2 [14]^2 [13]}{[34]^2 \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{[45](-13[35][12][34]\langle 23 \rangle \dots \langle 5 \text{ terms} \rangle \dots +10[35][14]^2 \langle 14 \rangle)}{[34]^2 [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-17[24][14]\langle 23 \rangle [35]^2}{[34]^2 [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{[14]\langle 46 \rangle (29\langle 36 \rangle [34]+9[24]\langle 26 \rangle +1\langle 16 \rangle [14])}{[34]\langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 36 \rangle (8[24][13]\langle 26 \rangle +33\langle 36 \rangle [13][34]+17[12][34]\langle 26 \rangle +33\langle 16 \rangle [14][13])}{[34]\langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{25[45][25][13]}{[34]^2 [56] \langle 2|1+4|3 \rangle} + \\
& \frac{18[45]^2 [14]\langle 23 \rangle s_{123}}{[34][56] \langle 2|1+3|4 \rangle^3} + \\
& \frac{[45]^2 (-13[24][13]\langle 23 \rangle +3\langle 13 \rangle [13][14]+7[24][14]\langle 24 \rangle)}{[34]^2 [56] \langle 2|1+3|4 \rangle^2} + \\
& \frac{[45](-4[45][12]\langle 23 \rangle -24[14]\langle 23 \rangle [25]-24\langle 13 \rangle [15][14])}{[34][56] \langle 2|1+3|4 \rangle^2} + \\
& \frac{[45](-9[14][25]-1[45][12])}{[34]^2 [56] \langle 2|1+3|4 \rangle}
\end{aligned}$$