

$$\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}$$