

$$\begin{aligned}
& \frac{-5/2\langle 46 \rangle [45][12]\langle 13 \rangle}{s_{123}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 46 \rangle [12](-3/2\langle 12 \rangle [25][14]\langle 14 \rangle \dots \langle 5 \text{ terms} \rangle \dots -3/2[14][35]\langle 14 \rangle \langle 13 \rangle)}{s_{123}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-1\langle 4|1+3|2 \rangle \langle 46 \rangle [12][35]\langle 14 \rangle}{\langle 1|2+4|3 \rangle \langle 4|1+2|3 \rangle^2 s_{123}} + \\
& \frac{-3/2\langle 46 \rangle [25][12]\langle 14 \rangle}{s_{123}\langle 1|2+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{1[12][35]\langle 14 \rangle \langle 26 \rangle \langle 1|3+4|2 \rangle}{\langle 1|2+4|3 \rangle^2 \langle 2|1+3|4 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-1/4(s_{12}-s_{34})\langle 16 \rangle (s_{124}-s_{234})[45][12]\langle 14 \rangle}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{1/4\langle 16 \rangle (s_{124}-s_{234})[25][12]\langle 14 \rangle}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle^2} + \\
& \frac{1/4(s_{12}-s_{34})[45][12]\langle 13 \rangle \langle 26 \rangle (s_{123}-s_{134})}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle^2} + \\
& \frac{-1\langle 26 \rangle [45][12]\langle 13 \rangle}{\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle^2} + \\
& \frac{[12]\langle 3 \rangle \langle 26 \rangle [12][35]\langle 14 \rangle + 3/2[13][35]\langle 36 \rangle \langle 14 \rangle + 5/2[13][45]\langle 46 \rangle \langle 14 \rangle - 3/2\langle 12 \rangle \langle 46 \rangle [12][35]}{[13]\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-3/32\langle 6|1+3|5 \rangle [12]\langle 13 \rangle (s_{25}+s_{26}+s_{45}+s_{46})(s_{12}-s_{34})^2}{\Delta_{13|24|56}^2 \langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{1/8\langle 6|1+3|5 \rangle [34][12]^2 \langle 24 \rangle \langle 13 \rangle}{[13]\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{1/8\langle 6|1+3|5 \rangle (s_{24}-s_{56})[12]\langle 14 \rangle [14]}{[13]\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-3/8(s_{24}-s_{56})\langle 46 \rangle [12][35]\langle 13 \rangle [14]}{[13]\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{[12]\langle 6|1+3|5 \rangle (15/8\langle 12 \rangle [24]\langle 34 \rangle \dots \langle 4 \text{ terms} \rangle \dots -1/8\langle 23 \rangle [23]\langle 13 \rangle)}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 36 \rangle [12](s_{12}-s_{34})(9/8[45]\langle 14 \rangle + 3/8\langle 12 \rangle [25])}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{[12]\langle 3 \rangle \langle 46 \rangle [35][14]\langle 13 \rangle^2 \dots \langle 4 \text{ terms} \rangle \dots + 3/4\langle 12 \rangle [25]\langle 46 \rangle \langle 13 \rangle [14]}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-3[15][12]\langle 16 \rangle}{[13]\langle 1|2+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-3/32\langle 6|1+3|5 \rangle \langle 4|1+3|2 \rangle [12]\langle 13 \rangle (s_{25}+s_{26}+s_{45}+s_{46})}{\Delta_{13|24|56}^2 \langle 1|2+4|3 \rangle} + \\
& \frac{[25][12](-3/4\langle 36 \rangle \langle 14 \rangle + 1/2\langle 46 \rangle \langle 13 \rangle)}{\Delta_{13|24|56}\langle 1|2+4|3 \rangle} + \\
& \frac{3/2[15]\langle 46 \rangle [12]}{[13]\langle 2|1+3|4 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-3/32\langle 6|1+3|5 \rangle [12]\langle 13 \rangle \langle 3|2+4|1 \rangle (s_{25}+s_{26}+s_{45}+s_{46})}{\Delta_{13|24|56}^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 36 \rangle [12](-3/8\langle 23 \rangle [25] + 3/2[45]\langle 34 \rangle)}{\Delta_{13|24|56}\langle 2|1+3|4 \rangle}
\end{aligned}$$