

$$\begin{aligned}
& \frac{12[35](s_{134}+s_{234})[13]\langle 24 \rangle \langle 26 \rangle}{\langle 2|1+4|3\rangle^4} + \\
& \frac{[35][13](24\langle 23 \rangle \langle 46 \rangle - 18\langle 24 \rangle \langle 36 \rangle)}{\langle 2|1+4|3\rangle^3} + \\
& \frac{-6[35]\langle 24 \rangle [12]\langle 26 \rangle}{\langle 2|1+4|3\rangle^3} + \\
& \frac{-6[35](s_{24}-s_{13})\langle 26 \rangle \langle 4|1+2|3\rangle}{\langle 1|2+4|3\rangle \langle 2|1+4|3\rangle^3} + \\
& \frac{\langle 26 \rangle [13](-6[12]\langle 26 \rangle \langle 14 \rangle - 6[13]\langle 14 \rangle \langle 36 \rangle - 6\langle 23 \rangle [23]\langle 46 \rangle)}{\langle 56 \rangle \langle 2|1+4|3\rangle^3} + \\
& \frac{6[35]\langle 2|1+4|5\rangle \langle 4|2+3|1\rangle}{[56]\langle 2|1+4|3\rangle^3} + \\
& \frac{-3\langle 13 \rangle [13]\langle 23 \rangle [34][35]\langle 46 \rangle \dots \langle 11 \text{ terms} \rangle \dots - 1\langle 23 \rangle \langle 34 \rangle [34]^2 [35]\langle 46 \rangle}{\langle 1|2+4|3\rangle \langle 2|1+4|3\rangle^2 \langle 2|1+3|4\rangle} + \\
& \frac{\langle 26 \rangle (-1\langle 34 \rangle^2 [34]^3 \langle 46 \rangle \dots \langle 6 \text{ terms} \rangle \dots - 1\langle 24 \rangle^2 [24]^2 [34]\langle 46 \rangle)}{\langle 56 \rangle \langle 1|2+4|3\rangle \langle 2|1+4|3\rangle^2 \langle 2|1+3|4\rangle} + \\
& \frac{\langle 26 \rangle (6[13]\langle 24 \rangle [24]\langle 36 \rangle \dots \langle 8 \text{ terms} \rangle \dots - 7\langle 13 \rangle [13]^2 \langle 36 \rangle)}{\langle 56 \rangle \langle 2|1+4|3\rangle^2 \langle 2|1+3|4\rangle} + \\
& \frac{[45](-7\langle 14 \rangle [14][15]\langle 24 \rangle \dots \langle 4 \text{ terms} \rangle \dots - 7[14]\langle 24 \rangle^2 [25])}{[56]\langle 2|1+4|3\rangle^2 \langle 2|1+3|4\rangle} + \\
& \frac{2[35]\langle 16 \rangle (s_{13}+s_{14}+s_{23}+s_{24})[23]\langle 24 \rangle}{\langle 1|2+4|3\rangle^2 \langle 2|1+4|3\rangle^2} + \\
& \frac{4[35]\langle 34 \rangle \langle 16 \rangle [23][13]\langle 12 \rangle}{\langle 1|2+4|3\rangle^2 \langle 2|1+4|3\rangle^2} + \\
& \frac{\langle 26 \rangle (-1[23]\langle 34 \rangle [34]\langle 46 \rangle \dots \langle 8 \text{ terms} \rangle \dots + 1\langle 12 \rangle [12][23]\langle 46 \rangle)}{\langle 56 \rangle \langle 1|2+4|3\rangle \langle 2|1+4|3\rangle^2} + \\
& \frac{[45](-10[13]\langle 14 \rangle \langle 34 \rangle [35] \dots \langle 4 \text{ terms} \rangle \dots - 9[13]\langle 14 \rangle^2 [15])}{[56]\langle 1|2+4|3\rangle \langle 2|1+4|3\rangle^2} + \\
& \frac{-2\langle 23 \rangle \langle 26 \rangle [25][14]}{\langle 2|1+4|3\rangle \langle 2|1+3|4\rangle^2} + \\
& \frac{\langle 26 \rangle (s_{14}-s_{23})(2[24]\langle 23 \rangle [35]+2[45][13]\langle 13 \rangle)}{\langle 1|2+4|3\rangle \langle 2|1+4|3\rangle \langle 2|1+3|4\rangle^2} + \\
& \frac{2\langle 23 \rangle [45]^2 \langle 4|2+3|1\rangle}{[56]\langle 2|1+4|3\rangle \langle 2|1+3|4\rangle^2} + \\
& \frac{-3\langle 12 \rangle [13][24]\langle 34 \rangle [35]\langle 36 \rangle \dots \langle 69 \text{ terms} \rangle \dots - 7\langle 23 \rangle [23]\langle 24 \rangle [24][25]\langle 26 \rangle}{\langle 56 \rangle [56]\langle 1|2+4|3\rangle \langle 2|1+4|3\rangle \langle 2|1+3|4\rangle} + \\
& \frac{-2\langle 34 \rangle [35]\langle 46 \rangle}{\langle 24 \rangle \langle 1|2+4|3\rangle \langle 2|1+4|3\rangle} + \\
& \frac{-4\langle 3|1+2|4\rangle [12]\langle 23 \rangle [45]^2}{[24][56]\langle 2|1+3|4\rangle^3}
\end{aligned}$$