

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