

$$\begin{aligned}
& \frac{-3\langle 24\rangle\langle 26\rangle[25][12]^2 s_{134}}{[13]\langle 2|5+6|2|^3\langle 2|1+4|3\rangle} + \\
& (123456 \rightarrow \overline{432165}) + \\
& \frac{[25][12]\langle 24\rangle(-4\langle 13\rangle\langle 23\rangle[35][13] \dots \langle 4 \text{ terms} \rangle \dots + 4\langle 14\rangle[15][14]\langle 12\rangle)}{[56]\langle 2|5+6|2|^2\langle 2|1+4|3|^2} + \\
& \frac{[25][12]\langle 24\rangle(1/2[23][13]\langle 23\rangle[45]\langle 34\rangle \dots \langle 3 \text{ terms} \rangle \dots + 1/2\langle 13\rangle[13]\langle 23\rangle[35][12])}{[13][56]\langle 2|5+6|2|^2\langle 2|1+4|3\rangle\langle 2|1+3|2} + \\
& \frac{[25][12](1\langle 14\rangle[15][14]\langle 24\rangle \dots \langle 6 \text{ terms} \rangle \dots - 3\langle 24\rangle\langle 13\rangle[15][13])}{[13][56]\langle 2|5+6|2|^2\langle 2|1+4|3\rangle} + \\
& \frac{[25]\langle 24\rangle[12](-1/2[25]\langle 34\rangle[14] + 1/2\langle 13\rangle[15][12])}{[13][56]\langle 2|5+6|2|^2\langle 2|1+3|2} + \\
& \frac{6\langle 24\rangle^2\langle 26\rangle[35][24]s_{134}}{\langle 12\rangle\langle 2|1+4|3|^3\langle 2|5+6|2} + \\
& \frac{[35](-3\langle 13\rangle\langle 23\rangle[25][13]^2 \dots \langle 11 \text{ terms} \rangle \dots + 1\langle 24\rangle[14][25][12]\langle 12\rangle)}{[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3|^2} + \\
& \frac{\langle 24\rangle[25][12](-1/2[34]\langle 24\rangle\langle 14\rangle[14][45] \dots \langle 3 \text{ terms} \rangle \dots - 1/2\langle 14\rangle[14]^2[35]\langle 12\rangle)}{\langle 12\rangle[13][34][56]\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3} + \\
& \frac{[45](-3\langle 14\rangle[13][15][12]\langle 12\rangle \dots \langle 10 \text{ terms} \rangle \dots - 1/2[24][13][25]\langle 24\rangle^2)}{\langle 12\rangle[13][34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3} + \\
& \frac{[35](-1/2\langle 14\rangle[14]^2[25]\langle 24\rangle \dots \langle 7 \text{ terms} \rangle \dots - 1/2[13]\langle 23\rangle^2[25][23])}{\langle 12\rangle[13][34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3} + \\
& \frac{1/2[45]^2\langle 4|1+3|2\rangle\langle 23\rangle}{\langle 12\rangle[34][56]\langle 2|5+6|2\rangle\langle 2|1+3|4} + \\
& \frac{[25][12](1/2\langle 24\rangle[45]\langle 23\rangle[23] - 1/2\langle 14\rangle[45][14]\langle 24\rangle - 1/2[45]\langle 34\rangle\langle 12\rangle[13] + 1/2\langle 14\rangle\langle 34\rangle[35]\langle 12\rangle)}{\langle 12\rangle[13][34][56]\langle 2|1+3|2\rangle\langle 2|5+6|2} + \\
& \frac{6[34]\langle 24\rangle\langle 26\rangle s_{124}\langle 34\rangle[35]}{\langle 12\rangle\langle 2|1+4|3|^3\langle 3|5+6|3} + \\
& \frac{-6\langle 26\rangle s_{134}[35]\langle 24\rangle}{\langle 12\rangle\langle 2|1+4|3|^3} + \\
& \frac{6\langle 24\rangle[23]\langle 26\rangle\langle 23\rangle[35]}{\langle 12\rangle\langle 2|1+4|3|^3} + \\
& \frac{-6\langle 2|3+4|1\rangle\langle 26\rangle[35][23]}{[34]\langle 2|1+4|3|^3} + \\
& \frac{\langle 36\rangle\langle 34\rangle[35]\langle 4|14\rangle[34][14]\langle 24\rangle + 4[24][34]\langle 24\rangle^2 - 4[13][12]\langle 12\rangle^2}{\langle 12\rangle\langle 2|1+4|3|^2\langle 3|5+6|3|^2} + \\
& \frac{[35](-1[24]^2\langle 23\rangle[35]\langle 24\rangle^2 \dots \langle 15 \text{ terms} \rangle \dots - 4[34]\langle 24\rangle\langle 14\rangle[14][45]\langle 34\rangle)}{\langle 12\rangle[34][56]\langle 2|1+4|3|^2\langle 3|5+6|3} + \\
& \frac{[35](-5/3[15][12]\langle 12\rangle^3 \dots \langle 13 \text{ terms} \rangle \dots - 11/3\langle 24\rangle\langle 14\rangle[14][45]\langle 12\rangle)}{\langle 12\rangle^2[34][56]\langle 2|1+4|3|^2} + \\
& \frac{8/3\langle 1|2+3|4\rangle\langle 26\rangle[35][23]^2}{[34]^2\langle 1|2+4|3\rangle^2\langle 2|1+4|3} + \\
& \frac{\langle 14\rangle[35](-8/3[34][23]\langle 26\rangle\langle 13\rangle\langle 23\rangle \dots \langle 4 \text{ terms} \rangle \dots + 1/2[23]\langle 26\rangle\langle 23\rangle\langle 12\rangle[24])}{\langle 12\rangle^2[34]\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3} + \\
& \frac{\langle 14\rangle\langle 4|3|34\rangle^2\langle 24\rangle\langle 26\rangle\langle 13\rangle[35] \dots \langle 5 \text{ terms} \rangle \dots + 13/6[23]\langle 26\rangle[13][45]\langle 12\rangle^2)}{\langle 12\rangle^2\langle 24\rangle[34]^2\langle 1|2+4|3\rangle\langle 2|1+4|3} + \\
& \frac{\langle 36\rangle\langle 34\rangle[35]\langle 9|2|14\rangle[14]\langle 24\rangle + 9/2[24]\langle 24\rangle^2 - 3/2\langle 24\rangle[12]\langle 12\rangle + 1[13]\langle 34\rangle\langle 12\rangle)}{\langle 12\rangle\langle 24\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3|^2} + \\
& \frac{\langle 34\rangle\langle 46\rangle[35]\langle 1|34\rangle[14] - 1\langle 23\rangle[12]}{\langle 24\rangle\langle 2|1+4|3\rangle\langle 3|5+6|3|^2} + \\
& \frac{[35]\langle 5|2|13\rangle[14]\langle 34\rangle^2[35]\langle 12\rangle^2 \dots \langle 10 \text{ terms} \rangle \dots + 8/3\langle 24\rangle\langle 13\rangle^2[13]^2\langle 23\rangle[35])}{\langle 12\rangle^2[13]\langle 24\rangle[34][56]\langle 2|1+4|3\rangle\langle 3|5+6|3} + \\
& \frac{[45](-1[34]^2\langle 34\rangle^2[35]\langle 24\rangle \dots \langle 9 \text{ terms} \rangle \dots + 9/2\langle 14\rangle[13][14]\langle 34\rangle[35]\langle 12\rangle)}{\langle 12\rangle^2[13][34][56]\langle 2|1+4|3\rangle\langle 3|5+6|3} + \\
& \frac{[45]\langle 7|6|34\rangle\langle 24\rangle^2\langle 14\rangle[14][35] \dots \langle 17 \text{ terms} \rangle \dots - 4/3\langle 14\rangle[13]^2[15]\langle 12\rangle^2)}{\langle 12\rangle^2[13]\langle 24\rangle[34]^2[56]\langle 2|1+4|3} + \\
& \frac{[35](-3/2\langle 24\rangle[14][12][35]\langle 12\rangle^2 \dots \langle 8 \text{ terms} \rangle \dots + 1\langle 24\rangle\langle 14\rangle[14]^2[35]\langle 12\rangle)}{\langle 12\rangle^2[13]\langle 24\rangle[34]^2[56]\langle 2|1+4|3} + \\
& \frac{-4/3[13][15][25]\langle 12\rangle}{\langle 24\rangle[34]^2[56]\langle 2|1+4|3} + \\
& \frac{1/2[34]\langle 14\rangle^2\langle 36\rangle s_{124}[35]}{\langle 12\rangle^2[13]\langle 1|2+4|3\rangle^2\langle 3|5+6|3} + \\
& \frac{-1/2\langle 24\rangle[23]^2\langle 36\rangle[35][24]}{[13][34]\langle 1|2+4|3\rangle^2\langle 3|2+4|3} + \\
& \frac{1/2\langle 14\rangle\langle 36\rangle s_{124}\langle 34\rangle[35]}{\langle 12\rangle\langle 24\rangle\langle 1|2+4|3\rangle\langle 3|5+6|3|^2} + \\
& \frac{\langle 14\rangle\langle 36\rangle(1/2[34]\langle 24\rangle[35][12]\langle 12\rangle \dots \langle 4 \text{ terms} \rangle \dots - 1/2[34]\langle 24\rangle\langle 14\rangle[13][45])}{\langle 12\rangle^2[13]\langle 24\rangle[34]\langle 1|2+4|3\rangle\langle 3|5+6|3} + \\
& \frac{\langle 14\rangle[45]\langle 20|3|14\rangle\langle 26\rangle - 17/2\langle 46\rangle\langle 12\rangle)}{\langle 12\rangle^2\langle 24\rangle[34]\langle 1|2+4|3} + \\
& \frac{-1/2\langle 14\rangle\langle 36\rangle^2[23]}{\langle 12\rangle\langle 56\rangle\langle 1|2+4|3\rangle\langle 3|2+4|3} + \\
& \frac{-1/2[24]\langle 36\rangle\langle 46\rangle[23]}{[34]\langle 56\rangle\langle 1|2+4|3\rangle\langle 3|2+4|3} + \\
& \frac{[45]\langle 5|3|24\rangle\langle 14\rangle[14]\langle 34\rangle[35] \dots \langle 10 \text{ terms} \rangle \dots + 1\langle 14\rangle[13][15]\langle 34\rangle\langle 12\rangle)}{\langle 12\rangle^2[13]\langle 24\rangle[34][56]\langle 3|5+6|3} + \\
& \frac{[35](-19/6\langle 24\rangle\langle 13\rangle[13]\langle 23\rangle[25] \dots \langle 9 \text{ terms} \rangle \dots - 1\langle 24\rangle\langle 13\rangle[15][12]\langle 12\rangle)}{\langle 12\rangle^2[13]\langle 24\rangle[34][56]\langle 3|5+6|3} + \\
& \frac{-1/2\langle 36\rangle^2[23]}{\langle 12\rangle[34]\langle 56\rangle\langle 3|2+4|3} + \\
& \frac{-1/2\langle 23\rangle[35][25][12]}{\langle 12\rangle[13][34][56]\langle 2|1+3|2}
\end{aligned}$$