

$$\begin{aligned}
& \frac{6\langle 12\rangle[12]^2[25]\langle 26\rangle s_{234}}{[34]\langle 2|5+6|2\rangle^3\langle 2|1+4|3\rangle} + \\
& \frac{[12]\langle 26\rangle(4[45]\langle 23\rangle\langle 24\rangle[23]^2 \dots \langle 9 \text{ terms} \rangle \dots -5[25]\langle 12\rangle[14]\langle 14\rangle[13])}{[34]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle^2} + \\
& \frac{-4[12]\langle 23\rangle[23]\langle 26\rangle[45]\langle 3|2+4|3\rangle}{[34]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{1[12]\langle 26\rangle\langle 6|1+5|2\rangle s_{234}}{[34]\langle 56\rangle\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{[12]\langle 26\rangle(-5[25]\langle 14\rangle[14] \dots \langle 4 \text{ terms} \rangle \dots +6\langle 34\rangle[24]\langle 35\rangle)}{[34]\langle 2|5+6|2\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{4[12]\langle 24\rangle^2[25][34][45]\langle 3|2+4|1\rangle}{[13][56]\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[12]\langle 26\rangle(-4[23][34]\langle 36\rangle\langle 34\rangle[13] \dots \langle 8 \text{ terms} \rangle \dots +7[24][14]\langle 46\rangle\langle 14\rangle[13])}{[13][34]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{7\langle 14\rangle[12][15]\langle 24\rangle[24][45]}{[34][56]\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 23\rangle[25](-15[13][45]\langle 14\rangle[12] \dots \langle 10 \text{ terms} \rangle \dots +7[13]\langle 13\rangle[12]\langle 35\rangle)}{[34][56]\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[12]^2\langle 26\rangle(-2\langle 36\rangle\langle 12\rangle[12] \dots \langle 6 \text{ terms} \rangle \dots +4[14]\langle 13\rangle\langle 46\rangle)}{[13]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+3|4\rangle} + \\
& \frac{-4[12]\langle 23\rangle[25][45]\langle 3|2+4|3\rangle}{[34][56]\langle 2|1+3|2\rangle\langle 2|5+6|2\rangle\langle 2|1+3|4\rangle} + \\
& \frac{-12\langle 12\rangle[12]\langle 26\rangle[35]\langle 4|2+3|1\rangle}{\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^3} + \\
& \frac{\langle 26\rangle(-8[13]^2\langle 23\rangle[23]^2\langle 36\rangle \dots \langle 12 \text{ terms} \rangle \dots +7\langle 13\rangle[13]^3[24]\langle 46\rangle)}{[13][34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{[35]\langle 4|45\rangle[24]\langle 24\rangle\langle 34\rangle[13] \dots \langle 9 \text{ terms} \rangle \dots +8[12][34]\langle 23\rangle\langle 34\rangle[35]}{[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{\langle 26\rangle(-2\langle 23\rangle[34]^2[12]^2\langle 46\rangle \dots \langle 9 \text{ terms} \rangle \dots -2[24][14]\langle 36\rangle\langle 14\rangle[13]^2)}{[13][34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[25](-8\langle 23\rangle^2[13]^2[24]\langle 35\rangle \dots \langle 15 \text{ terms} \rangle \dots +2\langle 13\rangle[45][14]\langle 24\rangle[13]^2)}{[13][34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[15](-7[12][24]\langle 23\rangle\langle 12\rangle[35] \dots \langle 3 \text{ terms} \rangle \dots +6[45][23][34]\langle 23\rangle\langle 34\rangle)}{[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[12]\langle 26\rangle(178/3[13][24]\langle 46\rangle+136/3\langle 36\rangle[23][13]-8[23][12]\langle 26\rangle-82/3[13]\langle 16\rangle[12])}{[13][34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{7[12][14]\langle 16\rangle\langle 46\rangle}{[34]\langle 56\rangle\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[25](13\langle 34\rangle[45][13] \dots \langle 6 \text{ terms} \rangle \dots +7[15]\langle 14\rangle[14])}{[34][56]\langle 2|5+6|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{4[12]\langle 23\rangle^2[25]^2}{[56]\langle 2|1+3|2\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{\langle 23\rangle\langle 34\rangle[45](-4[25]\langle 12\rangle[12]-6\langle 13\rangle[25][13]-4\langle 13\rangle[12][35])}{\langle 12\rangle[56]\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle s_{123}} + \\
& \frac{[12]\langle 36\rangle\langle 46\rangle(-18\langle 13\rangle[13]+35/3\langle 23\rangle[23]+23/3\langle 12\rangle[12])}{\langle 12\rangle[13]\langle 56\rangle\langle 2|1+3|2\rangle s_{123}} + \\
& \frac{-4\langle 12\rangle[12]\langle 23\rangle[45]^2\langle 4|2+3|1\rangle}{[56]\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle^2} + \\
& \frac{-8[12][14]^2\langle 24\rangle[34]\langle 46\rangle^2}{[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{-2[12]^3[34]\langle 26\rangle^2\langle 24\rangle}{[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[34]\langle 36\rangle\langle 2|12\rangle[14]\langle 46\rangle\langle 34\rangle[13] \dots \langle 6 \text{ terms} \rangle \dots +10\langle 13\rangle[12]\langle 26\rangle\langle 24\rangle[13]}{\langle 12\rangle[13]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 23\rangle[25](-4[23]\langle 23\rangle^2[13][35] \dots \langle 3 \text{ terms} \rangle \dots -4[12][34]\langle 23\rangle\langle 24\rangle[35])}{\langle 12\rangle[13][56]\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 14\rangle[14]^2\langle 46\rangle^2\langle 2|13\rangle[13] \dots \langle 4 \text{ terms} \rangle \dots -2\langle 12\rangle[12]}{\langle 12\rangle\langle 13\rangle[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 26\rangle\langle 46\rangle(-4[24][14]\langle 14\rangle\langle 34\rangle[13] \dots \langle 7 \text{ terms} \rangle \dots +8\langle 13\rangle[12][14]\langle 14\rangle[13])}{\langle 12\rangle\langle 13\rangle[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{2\langle 14\rangle[14]^2\langle 24\rangle^2[25]^2}{\langle 12\rangle\langle 13\rangle[13]^2[56]\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[15](-2\langle 13\rangle[45]\langle 14\rangle\langle 34\rangle[13]^2 \dots \langle 8 \text{ terms} \rangle \dots -2[34][14]\langle 14\rangle\langle 34\rangle^2[35])}{\langle 12\rangle\langle 13\rangle[13]^2[56]\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 16\rangle(-2[24]\langle 36\rangle\langle 24\rangle\langle 34\rangle[13] \dots \langle 5 \text{ terms} \rangle \dots +4[24]\langle 46\rangle\langle 23\rangle\langle 34\rangle[13])}{\langle 12\rangle\langle 13\rangle[13]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 16\rangle\langle 3|23\rangle[13]^2[24]\langle 46\rangle \dots \langle 7 \text{ terms} \rangle \dots +3[12]\langle 12\rangle[14]\langle 46\rangle[13]}{\langle 12\rangle[13][34]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{-2[23][12]\langle 36\rangle\langle 24\rangle\langle 26\rangle}{\langle 12\rangle[13]\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+4|3\rangle} + \\
& \frac{8[12][14]^2\langle 46\rangle\langle 24\rangle\langle 16\rangle}{\langle 12\rangle[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[12]\langle 26\rangle\langle 2|23\rangle[12]\langle 26\rangle\langle 23\rangle-8[14]^2\langle 46\rangle\langle 14\rangle}{\langle 12\rangle[13]^2\langle 56\rangle\langle 2|1+3|2\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 34\rangle[45](-59/3\langle 23\rangle[25]-77/3[15]\langle 13\rangle)}{\langle 12\rangle[56]\langle 2|1+3|4\rangle s_{123}} + \\
& \frac{\langle 26\rangle^2(4[13]\langle 23\rangle^2[23][12] \dots \langle 15 \text{ terms} \rangle \dots -3[12][34]\langle 23\rangle\langle 34\rangle[13])}{\langle 56\rangle\langle 2|3+4|1\rangle\langle 2|1+4|3\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{\langle 26\rangle\langle 2|13\rangle\langle 16\rangle[13]^3 \dots \langle 18 \text{ terms} \rangle \dots -5/3[12][34]\langle 26\rangle\langle 14\rangle[13]}{\langle 12\rangle[13][34]\langle 56\rangle\langle 2|1+4|3\rangle^2} + \\
& \frac{[35]\langle 31/3|34\rangle[13]^2[45]\langle 12\rangle \dots \langle 12 \text{ terms} \rangle \dots +55/3[45]\langle 24\rangle^2[13]\langle 24\rangle}{\langle 12\rangle[13][34][56]\langle 2|1+4|3\rangle^2} + \\
& \frac{4[12]\langle 14\rangle\langle 16\rangle\langle 34\rangle[34][35]}{\langle 13\rangle[13]\langle 1|2+4|3\rangle^2\langle 2|1+4|3\rangle} + \\
& \frac{\langle 24\rangle[12][34][35](-8/3\langle 24\rangle[25]-2\langle 34\rangle[35]-2/3[15]\langle 14\rangle)}{\langle 12\rangle[13]^2[56]\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle} + \\
& \frac{-2\langle 12\rangle[12]^2\langle 34\rangle[35]^2}{\langle 13\rangle[13]^2[56]\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle} + \\
& \frac{[12]\langle 16\rangle(4[13]\langle 36\rangle\langle 14\rangle+2\langle 23\rangle[23]\langle 46\rangle-2\langle 34\rangle[34]\langle 46\rangle-4\langle 13\rangle[13]\langle 46\rangle)}{\langle 13\rangle[13]\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+4|3\rangle} + \\
& \frac{\langle 26\rangle(-32\langle 13\rangle\langle 36\rangle[13]^3 \dots \langle 11 \text{ terms} \rangle \dots -2[34]\langle 24\rangle[12]^2\langle 26\rangle)}{\langle 12\rangle[13]^2\langle 56\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 23\rangle\langle 16\rangle(32[13]\langle 36\rangle+62[14]\langle 46\rangle-4[12]\langle 26\rangle)}{\langle 12\rangle\langle 56\rangle\langle 2|1+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{[12][35](-8/3\langle 24\rangle[25]-2\langle 34\rangle[35]-16/9[15]\langle 14\rangle)}{\langle 12\rangle[13]^2[56]\langle 1|2+4|3\rangle}
\end{aligned}$$