

$$\begin{aligned}
& \frac{-1\langle 14\rangle[23]\langle 16\rangle^2\langle 2|3+4|1\rangle[24](s_{14}-s_{23})}{\langle 56\rangle\langle 1|2+4|3\rangle^3\langle 2|1+3|4\rangle} + \\
& \frac{1[23]^2\langle 2|3+4|2\rangle\langle 16\rangle^2\langle 23\rangle(s_{14}-s_{23})}{\langle 56\rangle\langle 1|2+4|3\rangle^3\langle 2|1+3|4\rangle} + \\
& \frac{1\langle 14\rangle[23]\langle 4|2+3|1\rangle\langle 16\rangle^2[24]}{\langle 56\rangle\langle 1|2+4|3\rangle^3} + \\
& \frac{1[23]^2\langle 34\rangle\langle 16\rangle^2(s_{234}+s_{23})}{\langle 56\rangle\langle 1|2+4|3\rangle^3} + \\
& \frac{1/2\langle 13\rangle[35][24]\langle 26\rangle(s_{14}-s_{23})^2}{\langle 1|2+4|3\rangle^2\langle 2|1+3|4\rangle^2} + \\
& \frac{1/2[23]\langle 12\rangle\langle 6|1+3|5\rangle\langle 3|2+4|1\rangle\langle 1|3+4|2\rangle(s_{124}-s_{234})}{\Delta_{13|24|56}\langle 1|2+4|3\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{\langle 16\rangle(-3\langle 12\rangle[34]\langle 34\rangle[12]\langle 46\rangle[24]\dots\langle 21\text{ terms}\rangle\dots+2\langle 14\rangle\langle 36\rangle[13]\langle 24\rangle[24]^2)}{\langle 56\rangle\langle 1|2+4|3\rangle^2\langle 2|1+3|4\rangle} + \\
& \frac{-3/8\langle 13\rangle\langle 3|2+4|1\rangle\langle 6|1+3|5\rangle[34]\langle 4|1+3|2\rangle\langle 24\rangle[24](s_{134}+s_{123})}{\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle\Delta_{13|24|56}^2} + \\
& \frac{-3/8\langle 14\rangle^3\langle 36\rangle[14]^3[25]\dots\langle 68\text{ terms}\rangle\dots+9/16\langle 13\rangle^2[14][13]\langle 46\rangle\langle 24\rangle[24][25]}{\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle\Delta_{13|24|56}} + \\
& \frac{[14]\langle 1|14\rangle^2\langle 26\rangle[15][12]+1/2\langle 14\rangle^2[14][15]\langle 46\rangle+1/2\langle 12\rangle[35][12]\langle 46\rangle\langle 34\rangle}{[13]\langle 24\rangle\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{1\langle 14\rangle[14][45][12]\langle 46\rangle\dots\langle 4\text{ terms}\rangle\dots-1/2\langle 13\rangle[14][35][12]\langle 46\rangle}{[13]\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 46\rangle\langle 1|14\rangle\langle 16\rangle[14]^2[12]\dots\langle 4\text{ terms}\rangle\dots+1\langle 12\rangle\langle 36\rangle[12]^2[34]}{[13]\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 16\rangle(-3\langle 34\rangle\langle 36\rangle[12][34]\dots\langle 9\text{ terms}\rangle\dots+5/2\langle 12\rangle\langle 36\rangle[12]^2)}{\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 34\rangle[24]\langle 26\rangle\langle 1|23\rangle\langle 36\rangle-11/4[24]\langle 46\rangle}{\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} + \\
& \frac{\langle 36\rangle(-11/4[23]\langle 36\rangle[24]\langle 24\rangle-7/4[23]^2\langle 23\rangle\langle 36\rangle+1\langle 14\rangle[14][24]\langle 46\rangle)}{\langle 56\rangle\langle 1|2+4|3\rangle\langle 2|1+3|4\rangle} +
\end{aligned}$$

$$(123456 \rightarrow \overline{432165})$$