

$$\begin{aligned}
& \frac{35/8[14]\langle 23 \rangle [23]\langle 45 \rangle [56]\langle 56 \rangle \langle 3 \rangle 1+4[2]\langle 4 \rangle 2+3[1]\langle 6 \rangle 1+5[4]}{\langle 1 \rangle 2+3[4]\Delta_{14|23|56}^3} + \\
& \frac{[12]\langle 14 \rangle [45]\langle 23 \rangle [23]\langle 56 \rangle [56](s_{123}-s_{234})(5/8[13]\langle 6 \rangle 2+3[1]+5/16[14]\langle 14 \rangle \langle 36 \rangle)}{\langle 1 \rangle 2+3[4]\Delta_{14|23|56}^3} + \\
& \frac{\langle 13 \rangle [12]\langle 45 \rangle \langle 23 \rangle [23]^2 \langle 56 \rangle [56](-7\langle 12 \rangle \langle 36 \rangle + 7\langle 13 \rangle \langle 26 \rangle)}{\langle 1 \rangle 2+3[4]^2 \Delta_{14|23|56}^2} + \\
& \frac{\langle 13 \rangle [45]\langle 23 \rangle [23]\langle 56 \rangle [56](s_{123}-s_{234})(-3/4[24]\langle 46 \rangle - 7/4[23]\langle 36 \rangle)}{\langle 1 \rangle 2+3[4]^2 \Delta_{14|23|56}^2} + \\
& \frac{[12](s_{14}-s_{56})(s_{14}-s_{23})(-15\langle 13 \rangle [15]\langle 24 \rangle \langle 6 \rangle 1+4[2] \dots \langle 3 \text{ terms} \rangle \dots - 15/2[12]\langle 13 \rangle [15]\langle 16 \rangle \langle 24 \rangle)}{\Delta_{14|23|56}^3} + \\
& \frac{[12]\langle 23 \rangle [23]\langle 56 \rangle [56]\langle 45 \rangle 4[12]\langle 12 \rangle \langle 34 \rangle [45]\langle 46 \rangle \dots \langle 8 \text{ terms} \rangle \dots - 205/8[12]\langle 12 \rangle \langle 13 \rangle [15]\langle 46 \rangle)}{\Delta_{14|23|56}^3} + \\
& \frac{4[12]\langle 13 \rangle \langle 16 \rangle \langle 23 \rangle [23]\langle 45 \rangle}{\langle 1 \rangle 2+3[4]^2 \Delta_{14|23|56}^2} + \\
& \frac{[23]\langle 23 \rangle [12]\langle 16 \rangle (7/2\langle 23 \rangle)^2 [23]\langle 25 \rangle \dots \langle 11 \text{ terms} \rangle \dots + 9\langle 23 \rangle \langle 24 \rangle [24]\langle 25 \rangle)}{\langle 1 \rangle 2+3[4]\Delta_{14|23|56}^2} + \\
& \frac{[12]\langle 16 \rangle \langle 23 \rangle (s_{123}-s_{234})(43/4[12]\langle 14 \rangle [45]-35/4[14]\langle 14 \rangle [25]+15/4[24]\langle 4 \rangle 1+6[5])}{\langle 1 \rangle 2+3[4]\Delta_{14|23|56}^2} + \\
& \frac{41/2[12]\langle 14 \rangle \langle 36 \rangle [45] \dots \langle 4 \text{ terms} \rangle \dots - 25[12]\langle 13 \rangle [25]\langle 26 \rangle}{\langle 1 \rangle 2+3[4]\Delta_{14|23|56}^2} + \\
& \frac{[12]\langle 15 \rangle 4[12]\langle 12 \rangle \langle 34 \rangle [45]\langle 46 \rangle \dots \langle 14 \text{ terms} \rangle \dots + 3\langle 23 \rangle [23]\langle 24 \rangle [25]\langle 36 \rangle)}{\Delta_{14|23|56}^2} + \\
& (123456 \rightarrow -156423) + \\
& (123456 \rightarrow \overline{432165}) + \\
& (123456 \rightarrow -\overline{465132}) + \\
& \frac{105/4[14]\langle 14 \rangle \langle 23 \rangle [23]\langle 56 \rangle [56]\langle 3 \rangle 1+4[2]\langle 4 \rangle 2+3[1]\langle 6 \rangle 1+4[5](s_{123}+s_{234})}{\Delta_{14|23|56}^4} + \\
& \frac{-4\langle 13 \rangle \langle 16 \rangle \langle 23 \rangle [23]\langle 24 \rangle [45]\langle 56 \rangle [56]}{\langle 1 \rangle 2+3[4]^3 \Delta_{14|23|56}^3} + \\
& \frac{3[12]\langle 15 \rangle [23]\langle 23 \rangle \langle 34 \rangle \langle 46 \rangle \langle 56 \rangle [56]}{\langle 4 \rangle 2+3[1]\Delta_{14|23|56}^2} + \\
& \frac{4[12]\langle 15 \rangle \langle 34 \rangle \langle 46 \rangle}{\langle 4 \rangle 2+3[1]\Delta_{14|23|56}^2}
\end{aligned}$$