

$$\begin{aligned}
& \frac{\langle 24 \rangle [35] \langle 26 \rangle (s_{124} - s_{134}) [13] \langle 6 \rangle [14] \langle 24 \rangle [24] [14] \dots \langle \text{5 terms} \rangle \dots + 6 \langle 24 \rangle [12] \langle 24 \rangle [12]}{(2|1+4|3|^4 \Delta_{14|23|56}} + \\
& \frac{[13] [35] \langle 24 \rangle (s_{124} - s_{134}) (-18 [13] \langle 36 \rangle [12]^2 [12] \langle 34 \rangle [24] \dots \langle \text{15 terms} \rangle \dots + 9 [23] [34] [12] \langle 13 \rangle \langle 46 \rangle \langle 23 \rangle^2)}{(2|1+4|3|^3 \Delta_{14|23|56}^2} + \\
& \frac{[35] [13] (-96 \langle 23 \rangle \langle 34 \rangle^2 \langle 46 \rangle [34]^2 \dots \langle \text{11 terms} \rangle \dots - 96 [34] \langle 13 \rangle \langle 34 \rangle \langle 23 \rangle \langle 46 \rangle [13]}{(2|1+4|3|^3 \Delta_{14|23|56}} + \\
& \frac{[35] (s_{124} - s_{134}) (-18 [12] \langle 34 \rangle \langle 46 \rangle [14] [13] \dots \langle \text{6 terms} \rangle \dots + 48 [23] \langle 36 \rangle \langle 23 \rangle \langle 24 \rangle [13]}{(2|1+4|3|^3 \Delta_{14|23|56}} + \\
& \frac{[35] (-60 [14] [35] [34] \langle 34 \rangle [14] \langle 24 \rangle \dots \langle \text{7 terms} \rangle \dots + 84 [35] [23] [13] \langle 34 \rangle \langle 23 \rangle \langle 12 \rangle)}{[56] \langle 1|2+4|3 \rangle \langle 2|1+4|3 \rangle^3} + \\
& \frac{-49 [12] \langle 26 \rangle [25] \langle 24 \rangle^4 [24]^3 \dots \langle \text{57 terms} \rangle \dots + 18 [35] [23] [34] [12] \langle 13 \rangle \langle 34 \rangle \langle 46 \rangle \langle 23 \rangle^2 [13]}{(2|1+4|3|^2 \Delta_{14|23|56}^2} + \\
& \frac{4 [35] \langle 16 \rangle [23] \langle 24 \rangle (s_{134} + s_{234})}{(1|2+4|3|^2 \langle 2|1+4|3 \rangle^2} + \\
& \frac{\langle 26 \rangle (s_{14} - s_{23}) \langle 6 [35] [13]^2 (13)^2 \dots \langle \text{3 terms} \rangle \dots + 1 [35] \langle 23 \rangle^2 [23]^2)}{[56] [56] \langle 1|2+4|3 \rangle \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{230 [14] [35] [34] \langle 36 \rangle \langle 34 \rangle [13] \dots \langle \text{49 terms} \rangle \dots - 68 [35] [23] [12] \langle 13 \rangle \langle 26 \rangle \langle 24 \rangle}{[56] [56] \langle 1|2+4|3 \rangle \langle 2|1+4|3 \rangle^2} + \\
& \frac{1/2 [35] [23] \langle 13 \rangle \langle 34 \rangle \langle 46 \rangle \langle 23 \rangle (s_{124} - s_{134}) [13] (s_{23} - s_{56})}{\langle 14 \rangle \langle 2|1+4|3 \rangle^2 \Delta_{23|14|56}^2} + \\
& \frac{(s_{124} - s_{134}) (-1039/2 [35] [34] [12]^2 \langle 13 \rangle \langle 46 \rangle \langle 23 \rangle \langle 24 \rangle \dots \langle \text{28 terms} \rangle \dots + 26 [35] [23] \langle 36 \rangle \langle 13 \rangle \langle 34 \rangle \langle 23 \rangle [13]^2)}{(2|1+4|3|^2 \Delta_{23|14|56}^2} + \\
& \frac{[35] \langle 34 \rangle \langle 46 \rangle (-1 [24] [13] \langle 13 \rangle \langle 24 \rangle - 1 [13] \langle 12 \rangle \langle 13 \rangle [12] + 1 [13] \langle 13 \rangle \langle 23 \rangle [23] - 1 [34] \langle 34 \rangle \langle 23 \rangle [23])}{\langle 14 \rangle \langle 2|1+4|3 \rangle^2 \Delta_{23|14|56}} + \\
& \frac{[35] (s_{23} - s_{56}) \langle 34 \rangle \langle 46 \rangle (-2 [24] \langle 24 \rangle - 2 \langle 12 \rangle [12] - 1 \langle 34 \rangle [34])}{\langle 14 \rangle \langle 2|1+4|3 \rangle^2 \Delta_{23|14|56}} + \\
& \frac{\langle 46 \rangle^2 (-1 [24] [13] \langle 23 \rangle^2 [23] \dots \langle \text{4 terms} \rangle \dots + 1/2 [13]^2 \langle 13 \rangle^2 [14])}{[56] \langle 2|1+4|3 \rangle^2 \Delta_{23|14|56}} + \\
& \frac{(s_{14} - s_{23}) (-21/2 [12] \langle 26 \rangle [25] \langle 24 \rangle^2 [24] \dots \langle \text{14 terms} \rangle \dots - 1 [35] [12] \langle 13 \rangle \langle 46 \rangle [14] \langle 24 \rangle)}{[56] [56] \langle 2|1+4|3 \rangle^2 \Delta_{23|14|56}} + \\
& \frac{-215/2 [12] \langle 26 \rangle [25] \langle 24 \rangle^2 [24] \dots \langle \text{30 terms} \rangle \dots - 940 [35] [12]^2 \langle 23 \rangle \langle 46 \rangle \langle 12 \rangle}{(2|1+4|3|^2 \Delta_{23|14|56}} + \\
& \frac{8 [35] \langle 34 \rangle \langle 46 \rangle}{\langle 14 \rangle \langle 2|1+4|3 \rangle^2} + \\
& \frac{5/4 \langle 3|1+4|2 \rangle (s_{12} + s_{13} + s_{24} + s_{34}) [23]^2 \langle 3|1+4|5 \rangle \langle 4|2+3|1 \rangle \langle 46 \rangle \langle 23 \rangle \langle 12 \rangle}{\langle 14 \rangle \Delta_{14|23|56}^3 \langle 2|1+4|3 \rangle} + \\
& \frac{s_{23} (s_{124} - s_{134}) (s_{123} - s_{234}) (255/64 [35] [12] \langle 34 \rangle \langle 23 \rangle \langle 46 \rangle [24] \dots \langle \text{18 terms} \rangle \dots - 25/16 [23] \langle 36 \rangle \langle 34 \rangle \langle 23 \rangle [25] [13])}{(2|1+4|3| \Delta_{14|23|56}^3} + \\
& \frac{s_{23} \langle 4|2+3|1 \rangle (s_{124} - s_{134}) (-25/16 [23]^2 \langle 36 \rangle \langle 34 \rangle \langle 23 \rangle [45] \dots \langle \text{11 terms} \rangle \dots - 5/16 [23] \langle 36 \rangle \langle 13 \rangle \langle 34 \rangle [13] [45])}{(2|1+4|3| \Delta_{14|23|56}^3} + \\
& \frac{s_{23} \langle 3|1+4|2 \rangle (s_{123} - s_{234}) (-55/8 [12] \langle 26 \rangle [25] \langle 24 \rangle^2 [24] \dots \langle \text{9 terms} \rangle \dots - 35/8 [35] [12]^2 \langle 13 \rangle \langle 26 \rangle \langle 24 \rangle)}{(2|1+4|3| \Delta_{14|23|56}^3} + \\
& \frac{[12] \langle 13 \rangle \langle 26 \rangle [13] s_{23} \langle 4|2+3|1 \rangle \langle 3|1+4|2 \rangle (15/8 [35] \langle 13 \rangle + 15/8 [14] [45])}{(2|1+4|3| \Delta_{14|23|56}^3} + \\
& \frac{(s_{14} - s_{56}) (s_{124} - s_{134}) (s_{123} - s_{234}) (15/8 [35] [12] \langle 34 \rangle \langle 23 \rangle \langle 46 \rangle [24] \dots \langle \text{4 terms} \rangle \dots - 15/16 [35] \langle 36 \rangle \langle 34 \rangle^2 [24] [13])}{(2|1+4|3| \Delta_{14|23|56}^3} + \\
& \frac{-1/4 (s_{12} + s_{13} + s_{24} + s_{34}) [23]^2 \langle 6|1+4|5 \rangle \langle 13 \rangle \langle 34 \rangle^2 \langle 24 \rangle}{\langle 14 \rangle^2 \Delta_{14|23|56}^2 \langle 2|1+4|3 \rangle} + \\
& \frac{1 [35] [23] \langle 13 \rangle \langle 34 \rangle^2 \langle 46 \rangle}{\langle 14 \rangle^2 \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{13/4 [13]^2 \langle 13 \rangle^2 \langle 34 \rangle \langle 46 \rangle [25] \langle 24 \rangle [24] \dots \langle \text{32 terms} \rangle \dots - 7/2 [23]^2 [12] \langle 13 \rangle \langle 34 \rangle \langle 23 \rangle \langle 46 \rangle \langle 24 \rangle [45]}{(14) \langle 2|1+4|3 \rangle \Delta_{23|14|56}^2} + \\
& \frac{(s_{23} - s_{56}) (9/4 [35] [12] \langle 13 \rangle^2 \langle 34 \rangle \langle 46 \rangle [13] \dots \langle \text{17 terms} \rangle \dots + 1 [23]^2 \langle 34 \rangle \langle 46 \rangle \langle 23 \rangle^2 [25])}{(14) \langle 2|1+4|3 \rangle \Delta_{23|14|56}^2} + \\
& \frac{\langle 46 \rangle (11/16 \langle 36 \rangle [12] \langle 34 \rangle^3 [34]^3 \dots \langle \text{32 terms} \rangle \dots - 1/16 \langle 36 \rangle \langle 12 \rangle^3 [12]^4)}{[56] \langle 2|1+4|3 \rangle \Delta_{23|14|56}^2} + \\
& \frac{\langle 46 \rangle (s_{23} - s_{14}) (-29/8 [23] [13] \langle 36 \rangle \langle 34 \rangle \langle 23 \rangle [24] \dots \langle \text{12 terms} \rangle \dots - 9/8 [13] \langle 36 \rangle \langle 12 \rangle [12] \langle 34 \rangle [24])}{[56] \langle 2|1+4|3 \rangle \Delta_{23|14|56}^2} + \\
& \frac{-9205/32 [35] [34] \langle 36 \rangle \langle 34 \rangle^3 [24] [13] \dots \langle \text{68 terms} \rangle \dots - 149/4 [23] [12] \langle 13 \rangle \langle 46 \rangle \langle 23 \rangle^2 [25] [13]}{(2|1+4|3| \Delta_{23|14|56}^2} + \\
& \frac{\langle 34 \rangle (-19 [35] [24] \langle 34 \rangle \langle 46 \rangle \dots \langle \text{5 terms} \rangle \dots + 4 \langle 46 \rangle \langle 12 \rangle [12] [25])}{(14) \langle 2|1+4|3 \rangle \Delta_{23|14|56}} + \\
& \frac{16 (s_{23} - s_{56}) \langle 34 \rangle \langle 46 \rangle [25]}{(14) \langle 2|1+4|3 \rangle \Delta_{23|14|56}} + \\
& \frac{\langle 46 \rangle \langle 3/4 \rangle \langle 36 \rangle [12] \langle 34 \rangle [34] \dots \langle \text{4 terms} \rangle \dots + 9/2 [24] \langle 34 \rangle \langle 46 \rangle [14]}{[56] \langle 2|1+4|3 \rangle \Delta_{23|14|56}} + \\
& (123456 \rightarrow \overline{432165}) + \\
& \frac{-15/4 \langle 3|1+4|2 \rangle s_{56} \langle 6|1+4|5 \rangle (s_{124} - s_{134}) s_{23} \langle 24 \rangle [13] (s_{123} - s_{234})}{(2|1+4|3|^2 \Delta_{14|23|56}^3} + \\
& \frac{-105/64 \langle 3|1+4|2 \rangle (s_{12} + s_{13} + s_{24} + s_{34}) s_{56} \langle 6|1+4|5 \rangle \langle 4|2+3|1 \rangle (s_{124} - s_{134}) s_{23} (s_{123} - s_{234})}{\Delta_{14|23|56}^4 \langle 2|1+4|3 \rangle}
\end{aligned}$$