

$$\begin{aligned}
& \frac{-3/8[13][3|1+4|2]\langle 23 \rangle \langle 46 \rangle [35]}{\langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{1/16\langle 3|1+4|2 \rangle (s_{124} - s_{134}) \langle 46 \rangle [35] \langle 24 \rangle}{\langle 14 \rangle \langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{1/8[12] \langle s_{124} - s_{134} \rangle \langle 36 \rangle [35] \langle 24 \rangle}{\langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{1/16[13] \langle 3|1+4|2 \rangle (s_{124} - s_{134}) \langle 46 \rangle \langle 26 \rangle}{\langle 56 \rangle \langle 2|1+4|3 \rangle^2 \Delta_{14|23|56}} + \\
& \frac{3/16[13] \langle 3|1+4|2 \rangle \langle 4|2+3|1 \rangle \langle 6|1+4|5 \rangle \langle 13 \rangle}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{3/32[13] \langle 3|1+4|2 \rangle (s_{123} - s_{234}) \langle 6|1+4|5 \rangle \langle 34 \rangle}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{\langle 36 \rangle \langle 3|1+4|2 \rangle \langle 4|2+3|1 \rangle (-3/16\langle 3|1+4|3 \rangle [35] + 3/8[25] \langle 12 \rangle \langle 13 \rangle)}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{1/16\langle 46 \rangle [23] \langle 3|1+4|5 \rangle \langle 34 \rangle}{\langle 14 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{1/4\langle 46 \rangle \langle 34 \rangle \langle 3|1+4|2 \rangle [35]}{\langle 14 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{\langle 46 \rangle \langle 3|1+4|2 \rangle (1/4[13] \langle 36 \rangle + 1/16[14] \langle 46 \rangle)}{\langle 56 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{-1/16[12] \langle 36 \rangle \langle 46 \rangle (s_{14} - s_{23})}{\langle 56 \rangle \Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& (123456 \rightarrow \overline{432165}) + \\
& \frac{3/2\langle 24 \rangle [35]^2 (s_{13} - s_{24}) \langle 23 \rangle}{\langle 12 \rangle [56] \langle 2|1+4|3 \rangle^3} + \\
& \frac{2/3[13] [23] [35] \langle 24 \rangle^2 \langle 26 \rangle}{\langle 12 \rangle^2 \langle 2|1+4|3 \rangle^2 \langle 4|1+2|3 \rangle} + \\
& \frac{-1/12[25] \langle 14 \rangle \langle 24 \rangle \langle 12 \rangle \langle 26 \rangle \dots \langle 4 \text{ terms} \rangle \dots + 1/4[35] \langle 46 \rangle \langle 12 \rangle^2 \langle 34 \rangle}{\langle 12 \rangle^2 \langle 14 \rangle \langle 2|1+4|3 \rangle^2} + \\
& \frac{[35](-7/4\langle 24 \rangle [35] \langle 23 \rangle \langle 13 \rangle - 7/4\langle 24 \rangle^2 [45] \langle 13 \rangle + 1/4\langle 24 \rangle \langle 12 \rangle [45] \langle 34 \rangle - 1/4[35] \langle 34 \rangle \langle 12 \rangle \langle 23 \rangle)}{\langle 12 \rangle^2 [56] \langle 2|1+4|3 \rangle^2} + \\
& \frac{1/12[24] \langle 46 \rangle \langle 24 \rangle^2 \langle 12 \rangle [45] \dots \langle 9 \text{ terms} \rangle \dots + 1/12[24] \langle 23 \rangle \langle 46 \rangle [35] \langle 24 \rangle \langle 12 \rangle}{\langle 12 \rangle \langle 14 \rangle \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 23 \rangle [35] (-3/4\langle 24 \rangle [34] \langle 34 \rangle [45] \dots \langle 3 \text{ terms} \rangle \dots - 17/12[35] [13] \langle 23 \rangle \langle 13 \rangle)}{\langle 12 \rangle [56] \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 26 \rangle (-2/3\langle 24 \rangle [13] [24] \langle 36 \rangle \dots \langle 4 \text{ terms} \rangle \dots + 2/3[12] [34] \langle 24 \rangle \langle 36 \rangle)}{\langle 56 \rangle \langle 2|1+4|3 \rangle^2 \langle 2|1+3|4 \rangle} + \\
& \frac{-1/4[12] [15] \langle 26 \rangle}{[14] \langle 2|1+4|3 \rangle^2} + \\
& \frac{\langle 14 \rangle \langle 24 \rangle \langle 46 \rangle [35] (-7/6[13] \langle 13 \rangle + 5/12[12] \langle 12 \rangle)}{\langle 12 \rangle^2 \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle^2} + \\
& \frac{3/2\langle 24 \rangle^2 [35]^2 \langle 13 \rangle^2}{\langle 12 \rangle^3 [56] \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-1/2[13] \langle 13 \rangle \langle 14 \rangle \langle 46 \rangle \langle 26 \rangle}{\langle 12 \rangle^2 \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{-7/12\langle 14 \rangle [35] \langle 24 \rangle \langle 34 \rangle [45]}{\langle 12 \rangle^2 [56] \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{7/12\langle 24 \rangle \langle 36 \rangle \langle 14 \rangle [35]}{\langle 12 \rangle^2 \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{5/12[12] \langle 46 \rangle \langle 14 \rangle \langle 26 \rangle}{\langle 12 \rangle \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{\langle 34 \rangle [35] (7/12[15] \langle 14 \rangle + 7/12\langle 34 \rangle [35])}{\langle 12 \rangle [56] \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{7/12\langle 46 \rangle \langle 34 \rangle [35]}{\langle 12 \rangle \langle 2|1+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{\langle 23 \rangle \langle 13 \rangle \langle 26 \rangle (-1/2[34] \langle 46 \rangle + 1/2[23] \langle 26 \rangle)}{\langle 12 \rangle^2 \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-1/6[35]^2 \langle 23 \rangle^2 \langle 13 \rangle}{\langle 12 \rangle^2 [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-5/4[35] \langle 23 \rangle \langle 26 \rangle \langle 13 \rangle}{\langle 12 \rangle^2 \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 2|1+3|5 \rangle [45] \langle 23 \rangle (1/3[13] \langle 13 \rangle \dots \langle 3 \text{ terms} \rangle \dots - 1/4[12] \langle 12 \rangle)}{(\langle 12 \rangle [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle)^2} + \\
& \frac{[45] \langle 23 \rangle^2 (1/3\langle 24 \rangle [23] [45] - 2/3[35] [13] \langle 13 \rangle - 2/3[13] \langle 12 \rangle [25])}{(\langle 12 \rangle [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle)^2} + \\
& \frac{-1/12\langle 24 \rangle [25] \langle 16 \rangle \langle 23 \rangle}{\langle 12 \rangle \langle 14 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 36 \rangle (-5/3[23] \langle 26 \rangle \langle 23 \rangle \dots \langle 4 \text{ terms} \rangle \dots - 25/12[13] \langle 26 \rangle \langle 13 \rangle)}{\langle 12 \rangle \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-1/12[24] \langle 46 \rangle \langle 26 \rangle \langle 23 \rangle}{\langle 12 \rangle \langle 56 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 23 \rangle [35] (-2\langle 34 \rangle [45] - 1/6[25] \langle 23 \rangle)}{\langle 12 \rangle [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 24 \rangle [45] (3/4\langle 34 \rangle [45] - 3/4[25] \langle 23 \rangle)}{\langle 12 \rangle [56] \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-3[15] \langle 26 \rangle \langle 13 \rangle + 3/4\langle 24 \rangle \langle 36 \rangle [45] - 13/4\langle 46 \rangle [45] \langle 23 \rangle - 8/3[25] \langle 26 \rangle \langle 23 \rangle}{\langle 12 \rangle \langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{9/4[15] \langle 36 \rangle}{\langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-9/32(s_{14} - s_{56}) \langle 6|1+4|5 \rangle \langle 3|1+4|2 \rangle \langle 4|2+3|1 \rangle}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{-3/32\langle 4|2+3|1 \rangle \langle 6|1+4|5 \rangle \langle 3|1+4|2 \rangle s_{23}}{\langle 2|1+4|3 \rangle \Delta_{14|23|56}^2} + \\
& \frac{1/16[15] \langle 46 \rangle \langle 3|1+4|2 \rangle}{\Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{1/16[12] \langle 34 \rangle \langle 6|1+4|5 \rangle}{\Delta_{14|23|56} \langle 2|1+4|3 \rangle} + \\
& \frac{1/2\langle 46 \rangle^2 [23] \langle 14 \rangle \langle 4|2+3|1 \rangle}{\langle 12 \rangle \langle 56 \rangle \langle 4|1+2|3 \rangle^3}
\end{aligned}$$