

$$\begin{aligned}
& \frac{-1/3(12)\langle 23 \rangle (34)^2 [14] \langle 46 \rangle [35]}{(14) \Delta_{14|23|56} (2|1+4|3)^2} + \\
& \frac{-1/4(34)^2 [14] \langle 46 \rangle (26) (s_{14-s_{56}}) [34]}{(23) \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)^2} + \\
& \frac{-1/3[24][13][25] \langle 36 \rangle (24)^2 \dots \langle 8 \text{ terms} \rangle \dots + 1/2(12) \langle 23 \rangle (46) [35] [12]^2}{(2|1+4|3)^2 \Delta_{14|23|56}} + \\
& \frac{(26) (-5/12(34) [24]^2 [13] \langle 46 \rangle (24) \dots \langle 4 \text{ terms} \rangle \dots + 5/6(34)^2 [23] [13] \langle 36 \rangle [34])}{(56) (2|1+4|3)^2 \Delta_{14|23|56}} + \\
& \frac{[35] (s_{124-s_{134}}) (-1/3(23) [12] \langle 46 \rangle - 1/4(34) (36) [13])}{(2|1+4|3)^2 \Delta_{14|23|56}} + \\
& \frac{(26) (s_{124-s_{134}}) (-5/6(36) [12] [13] (14+3/4(12)) [12]^2 \langle 46 \rangle + 3/4(34) \langle 46 \rangle [24] [13] + 1/4(34) [12] [34] \langle 46 \rangle)}{(56) (2|1+4|3)^2 \Delta_{14|23|56}} + \\
& \frac{(46) \langle 34 \rangle (26) (s_{23-s_{56}}) (1/3[23] \langle 13 \rangle (23) [13] \dots \langle 3 \text{ terms} \rangle \dots + 1/12[24] [23] \langle 23 \rangle (24))}{(14) (23) \langle 56 \rangle (2|1+4|3)^2 \Delta_{14|23|56}} + \\
& \frac{2/3(13)^2 (26) [35] [12]^2 [34]^2 (24)^2 \dots \langle 45 \text{ terms} \rangle \dots - 1/3(12) [45] [24] [13]^3 \langle 36 \rangle (14) \langle 13 \rangle (24)}{(12) (14) [14] [23] [23] [34] \langle 56 \rangle [56] (2|1+4|3)^2} + \\
& \frac{-1/12[23] \langle 34 \rangle^2 (s_{124-s_{134}}) (6|1+4|5) (s_{123-s_{234}})}{(14) \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{(34)^2 [23] \langle s_{23-s_{56}} \rangle (6|1+4|5) (1/48(13) [13] - 3/16[24] \langle 24 \rangle - 1/12(34) [34])}{(14) \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{5/24(12) [23] \langle 34 \rangle^2 [25] [14] \langle 46 \rangle (s_{23-s_{56}})}{(14) \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{1/32 \langle 36 \rangle (3|1+4|2) [15] (s_{14-s_{56}}) (s_{123-s_{234}}) \langle 24 \rangle}{(23) \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{1/32(s_{25+s_{35}+s_{26}+s_{36}}) \langle 36 \rangle (3|1+4|2) [14] \langle 46 \rangle (s_{123-s_{234}}) \langle 24 \rangle}{(23) \langle 56 \rangle \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{-1/32[13] \langle 36 \rangle (3|1+4|2) (s_{23-s_{14}}) \langle 46 \rangle (s_{123-s_{234}})}{(56) \Delta_{14|23|56}^2 (2|1+4|3)} + \\
& \frac{(34) (s_{134-s_{124}}) (s_{123-s_{234}}) (7/12 \langle 36 \rangle [13] [25] + 29/96[14] \langle 46 \rangle [25] - 1/2[35] \langle 36 \rangle [12])}{(2|1+4|3) \Delta_{14|23|56}^2} + \\
& \frac{(s_{123-s_{234}}) (3|1+4|2) (-53/32[35] \langle 23 \rangle [12] \langle 46 \rangle - 17/24(13) \langle 46 \rangle [13] [15] - 17/96[35] \langle 34 \rangle \langle 36 \rangle [13] + 7/96[35] \langle 34 \rangle \langle 46 \rangle [14])}{(2|1+4|3) \Delta_{14|23|56}^2} + \\
& \frac{(3|1+4|2) \langle 4|2+3|1 \rangle (5/4(12) [12] \langle 16 \rangle [15] \dots \langle 5 \text{ terms} \rangle \dots + 101/48[35] \langle 23 \rangle \langle 46 \rangle [24])}{(2|1+4|3) \Delta_{14|23|56}^2} + \\
& \frac{7/12(34)^3 [24] [13] \langle 36 \rangle [35] [34] \dots \langle 33 \text{ terms} \rangle \dots + 1/6(34) \langle 23 \rangle \langle 13 \rangle \langle 46 \rangle [35] [12]^2 [34]}{(2|1+4|3) \Delta_{14|23|56}^2} + \\
& \frac{1/12(34) \langle 3|1+4|2 \rangle (13) \langle 46 \rangle [35] \langle 24 \rangle}{(14)^2 \langle 23 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{1/12(34)^2 \langle 13 \rangle (s_{23-s_{56}}) \langle 46 \rangle [35]}{(14)^2 \langle 23 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{1/24(12) \langle 34 \rangle (3|1+4|2) (s_{23-s_{56}}) \langle 46 \rangle^2}{(14)^2 \langle 23 \rangle \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) \langle 46 \rangle (-1/2[35] \langle 34 \rangle [24] - 17/24[24] [25] \langle 24 \rangle - 11/8(13) [25] [13] - 13/12(12) [12] [25])}{(14) \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{1/12[23] \langle 34 \rangle \langle 36 \rangle \langle 4|2+3|1 \rangle (13) \langle 26 \rangle}{(14) \langle 23 \rangle \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{1/4(34)^2 [23] [14] \langle 13 \rangle \langle 46 \rangle (26)}{(14) \langle 23 \rangle \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{[23] \langle 36 \rangle (34) \langle 46 \rangle (3/8[24] \langle 24 \rangle + 5/12(34) [34] - 1/24(13) [13])}{(14) \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{-1/12[23] \langle 34 \rangle^2 [45] [25] \langle 24 \rangle}{(14) [56] \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{1(34) (s_{23-s_{56}}) \langle 46 \rangle [25]}{(14) \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) (s_{23-s_{56}}) (1/8[25] [13] \langle 36 \rangle \langle 13 \rangle \langle 24 \rangle \dots \langle 5 \text{ terms} \rangle \dots - 1/24(34) [45] [24] \langle 46 \rangle \langle 24 \rangle)}{(14) \langle 23 \rangle \langle 56 \rangle [56] \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) (s_{23-s_{56}}) (-3/8[35] \langle 34 \rangle \langle 46 \rangle [24] \dots \langle 4 \text{ terms} \rangle \dots - 5/24(12) [12] \langle 46 \rangle [25])}{(14) \langle 56 \rangle [56] \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{7/24(34) \langle 36 \rangle (s_{14-s_{56}}) [15]}{(23) \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{-7/24(34) \langle 36 \rangle (s_{14-s_{56}}) [12] \langle 26 \rangle}{(23) \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) [14] (s_{14-s_{56}}) (-1/8(34) [45] \langle 46 \rangle + 1/6[35] \langle 34 \rangle \langle 36 \rangle + 11/24 \langle 36 \rangle [25] \langle 24 \rangle)}{(23) \langle 56 \rangle [56] \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) \langle 36 \rangle (1/24(34) [45] [13] - 1/3(12) [12] [15] - 5/24(13) [13] [15])}{(23) \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{(34) \langle 36 \rangle \langle 46 \rangle [14] (1/12(13) [13] + 5/24[24] \langle 24 \rangle + 1/8(34) [34])}{(23) \langle 56 \rangle \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{-1/24[35] (34)^3 [45] [14]}{(23) [56] \Delta_{14|23|56} (2|1+4|3)} + \\
& \frac{-35/24(34) \langle 23 \rangle [24] \langle 46 \rangle [35] [12] \dots \langle 18 \text{ terms} \rangle \dots - 1/24[23] \langle 34 \rangle \langle 23 \rangle [25] [13] \langle 36 \rangle}{(56) [56] (2|1+4|3) \Delta_{14|23|56}} + \\
& \frac{1/6(13)^2 \langle 46 \rangle^2 \langle 24 \rangle}{(12) (14)^2 \langle 23 \rangle \langle 56 \rangle (2|1+4|3)} + \\
& \frac{15/2(12) [24] [25] \langle 23 \rangle [13]^2 \langle 13 \rangle \langle 46 \rangle (24) \dots \langle 120 \text{ terms} \rangle \dots + 2/3[23] [45] \langle 23 \rangle \langle 13 \rangle \langle 46 \rangle [12] [34] \langle 24 \rangle^2}{(12) (14) [14] [23] [23] \langle 24 \rangle [34] \langle 56 \rangle [56] (2|1+4|3)} + \\
& \frac{-1/12(34)^2 \langle 13 \rangle \langle 46 \rangle [25]}{(14)^2 \langle 23 \rangle \Delta_{14|23|56}} + \\
& \frac{1/6(34) \langle 13 \rangle^2 \langle 46 \rangle^2}{(12) \langle 14 \rangle^2 \langle 23 \rangle \langle 56 \rangle \langle 4|2+3|4 \rangle} + \\
& \frac{-1/3[13] [15] \langle 13 \rangle^2 \langle 46 \rangle [12] [34]}{(12) [13] \langle 14 \rangle [14] [34] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{(14) [12] [15] \langle 2|3(36) [34] \langle 14 \rangle - 1/12(13) [34] \langle 46 \rangle - 1/4[23] \langle 13 \rangle (26))}{(12) [13] \langle 14 \rangle [34] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{(34) [34] [12] [15] (-1/3(13) \langle 46 \rangle + 2/3 \langle 36 \rangle \langle 14 \rangle)}{[13] \langle 14 \rangle \langle 23 \rangle [34] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{-1/6(13)^2 [12] [15]^2}{(12) [14] [56] (1|2+3|1) (1|5+6|1)} + \\
& \frac{(13) [12] [15] (-1/3[14] \langle 34 \rangle [25] [13] + 1/3[35] \langle 34 \rangle [12] [14] - 1/3[45] [12]^2 \langle 24 \rangle - 1/3(34) [12] [45] [13])}{[13] [14] \langle 23 \rangle [23] [56] (1|2+3|1) (1|5+6|1)} + \\
& \frac{[12] [15] (7/4(12) [24] \langle 23 \rangle [35] [12] \dots \langle 4 \text{ terms} \rangle \dots - 29/3[14] \langle 13 \rangle^2 [35] [13])}{(12) [13] [14] \langle 23 \rangle [23] [34] [56] (1|2+3|1)} + \\
& \frac{(13) [13] [12] [15] (11/12 \langle 36 \rangle [34] + 1/4 \langle 26 \rangle [24])}{(12) [13] [14] [34] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{(24) [12] [15] (1/3 \langle 36 \rangle [24] \langle 14 \rangle - 1/3(13) [12] \langle 16 \rangle)}{(12) [13] \langle 23 \rangle [23] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{-49/6[24] [15] (16) (1|3+4|1) [12]}{(12) [14] [23] [34] \langle 56 \rangle [56] (1|5+6|1)} + \\
& \frac{[12] [15] (1/3 \langle 36 \rangle [24] \langle 14 \rangle - 1/3(13) [12] \langle 16 \rangle)}{(12) [14] [23] \langle 56 \rangle [56] (1|5+6|1)} + \\
& (123456 \rightarrow \bar{4}32165) + \\
& \frac{-1/2(s_{13-s_{24}}) (s_{124-s_{134}}) \langle 4|2+3|1 \rangle [35] \langle 26 \rangle}{\Delta_{14|23|56} (2|1+4|3)^3} + \\
& \frac{-5/12(3|1+4|2) (s_{13-s_{24}}) (s_{124-s_{134}}) \langle 4|2+3|1 \rangle [35] \langle 26 \rangle}{\Delta_{14|23|56}^2 (2|1+4|3)^2} + \\
& \frac{-35/384(s_{123+s_{234}}) \langle 3|1+4|2 \rangle (s_{124-s_{134}}) \langle 4|2+3|1 \rangle (6|1+4|5) (s_{123-s_{234}})}{\Delta_{14|23|56}^3 (2|1+4|3)}
\end{aligned}$$