

$$\begin{aligned}
& \frac{-1/4[23]^2[14]^2(16)^2}{[34]^3\langle 56 \rangle [1]5+6[1](1|2+4|3)} + \\
& \frac{-1/8[24]^2[13](26)^2}{\langle 12 \rangle [34]^3\langle 56 \rangle (2|3+4|1)} + \\
& \frac{1/4[24][45][35]}{\langle 12 \rangle [34]^3\langle 56 \rangle} + \\
& \frac{3/8(14)^2[24][14][35]^2}{\langle 12 \rangle [34]^2\langle 56 \rangle (1|2+4|3)\langle 4|1+2|3 \rangle} + \\
& \frac{2/9\langle 46 \rangle [35]\langle 14 \rangle^2[14]^3[34]\langle 12 \rangle \dots \langle 40 \text{ terms} \rangle \dots -1/4\langle 46 \rangle [45]\langle 24 \rangle \langle 34 \rangle [34]^3\langle 12 \rangle [12]}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34]^2[56](1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{-3/4[24][13][12](16)^2}{[34]^2\langle 56 \rangle (1|5+6|1)\langle 1|2+4|3 \rangle} + \\
& \frac{-13/4\langle 6|1+5|3 \rangle [24]\langle 36 \rangle [23]}{[34]^2\langle 56 \rangle (1|2+4|3)\langle 3|2+4|3 \rangle} + \\
& \frac{-43/12\langle 46 \rangle \langle 14 \rangle [45][13][24]\langle 24 \rangle [34] \dots \langle 51 \text{ terms} \rangle \dots -5/72\langle 23 \rangle [35][24][23]^2\langle 26 \rangle \langle 24 \rangle}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34]^2[56](1|2+4|3)} + \\
& \frac{-9/2\langle 23 \rangle \langle 46 \rangle [35]\langle 13 \rangle [13]\langle 24 \rangle [34]^2[12] \dots \langle 52 \text{ terms} \rangle \dots +1/2\langle 46 \rangle [45][13]^3\langle 13 \rangle \langle 34 \rangle [34]\langle 12 \rangle}{\langle 12 \rangle [13]\langle 24 \rangle [34]^2\langle 56 \rangle [56]\langle 2|1+4|3 \rangle \langle 3|5+6|3 \rangle} + \\
& \frac{1/8\langle 23 \rangle^2\langle 46 \rangle [35][24][13][23] \dots \langle 76 \text{ terms} \rangle \dots +3/8[35]\langle 13 \rangle \langle 26 \rangle \langle 24 \rangle [34][12]^2}{\langle 12 \rangle [13]\langle 24 \rangle [34]^2\langle 56 \rangle [56]\langle 3|5+6|3 \rangle} + \\
& \frac{7/8\langle 23 \rangle^3\langle 46 \rangle [35][13][23][34]^2 \dots \langle 17 \text{ terms} \rangle \dots -3/8[45][13]^3\langle 13 \rangle^2\langle 26 \rangle \langle 24 \rangle [34]}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34]^2[56]\langle 2|1+4|3 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{3/4[13][25]\langle 26 \rangle \langle 12 \rangle^2[12] \dots \langle 34 \text{ terms} \rangle \dots +7/8\langle 23 \rangle \langle 46 \rangle [35][34]\langle 12 \rangle [12]}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [34]^2[56]\langle 2|1+4|3 \rangle} + \\
& \frac{3/8\langle 23 \rangle [24][13]^2\langle 13 \rangle \langle 26 \rangle^2}{\langle 12 \rangle \langle 24 \rangle [34]^2\langle 56 \rangle \langle 2|3+4|1 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{3/8\langle 23 \rangle [24][13]^2[25]\langle 26 \rangle \langle 12 \rangle \dots \langle 54 \text{ terms} \rangle \dots -1/4[45]\langle 26 \rangle \langle 24 \rangle [34]\langle 12 \rangle [12]^2}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34]^2[56]\langle 2|1+3|4 \rangle} + \\
& \frac{[13][24]\langle 26 \rangle (-1\langle 36 \rangle \langle 24 \rangle +5/8\langle 23 \rangle \langle 46 \rangle)}{\langle 12 \rangle \langle 24 \rangle [34]^2\langle 56 \rangle \langle 2|3+4|1 \rangle} + \\
& \frac{-3/8[24]\langle 24 \rangle [15][45]}{\langle 12 \rangle [34]^2[56]\langle 2|3+4|1 \rangle} + \\
& \frac{43/12\langle 23 \rangle \langle 46 \rangle [35][24][13] \dots \langle 31 \text{ terms} \rangle \dots +1\langle 23 \rangle [35][23]\langle 26 \rangle [12]}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34]^2[56]} + \\
& \frac{\langle 16 \rangle \langle 3/8(13)23 \rangle^2\langle 24 \rangle^2\langle 26 \rangle [34][12] \dots \langle 5 \text{ terms} \rangle \dots +1/8\langle 36 \rangle [24][23]^2\langle 24 \rangle^3[34]}{\langle 12 \rangle [13]\langle 24 \rangle [34]\langle 56 \rangle (1|2+4|3)^2\langle 3|5+6|3 \rangle} + \\
& \frac{\langle 14 \rangle^2[45][35](-1/8\langle 14 \rangle^2[13][14]-1/8\langle 23 \rangle \langle 24 \rangle [23]^2)}{\langle 12 \rangle \langle 24 \rangle [34][56](1|2+4|3)^2\langle 4|1+2|3 \rangle} + \\
& \frac{\langle 46 \rangle [23](1/8\langle 14 \rangle [13]\langle 13 \rangle [34]\langle 16 \rangle +1/8\langle 14 \rangle^2[14][34]\langle 16 \rangle +1/8\langle 12 \rangle^2\langle 46 \rangle [24][23]+1/8\langle 12 \rangle^2\langle 36 \rangle [23]^2)}{\langle 12 \rangle [34]\langle 56 \rangle (1|2+4|3)^2\langle 4|1+2|3 \rangle} + \\
& \frac{[24]\langle 16 \rangle (1/6\langle 14 \rangle^2\langle 26 \rangle [14][34] \dots \langle 3 \text{ terms} \rangle \dots -1/6\langle 36 \rangle \langle 14 \rangle [13][34]\langle 12 \rangle)}{\langle 12 \rangle [34]\langle 56 \rangle (1|2+4|3)^2\langle 2|1+3|4 \rangle} + \\
& \frac{1/8\langle 36 \rangle [24]\langle 6|1+5|3 \rangle [23]^2\langle 24 \rangle}{[13][34]\langle 56 \rangle (1|2+4|3)^2\langle 3|2+4|3 \rangle} + \\
& \frac{23/8\langle 36 \rangle [24][23]^2\langle 24 \rangle \langle 16 \rangle}{[34]\langle 56 \rangle (1|2+4|3)^2\langle 3|2+4|3 \rangle} + \\
& \frac{\langle 16 \rangle (-7/12\langle 14 \rangle [13][23]\langle 26 \rangle \langle 12 \rangle [12] \dots \langle 9 \text{ terms} \rangle \dots -145/72\langle 14 \rangle [24][13][23]\langle 26 \rangle \langle 24 \rangle)}{\langle 12 \rangle [13]\langle 24 \rangle [34]\langle 56 \rangle (1|2+4|3)^2} + \\
& \frac{[35]\langle 14 \rangle^2(1/8[24]\langle 24 \rangle [14][35] \dots \langle 4 \text{ terms} \rangle \dots +1/8[45][13]\langle 34 \rangle [34])}{\langle 12 \rangle [13]\langle 24 \rangle [34][56](1|2+4|3)^2} + \\
& \frac{-1/8\langle 14 \rangle^3[45]^2[13]}{\langle 12 \rangle \langle 24 \rangle [34][56]\langle 1|2+4|3 \rangle^2} + \\
& \frac{1/8\langle 14 \rangle \langle 36 \rangle \langle 26 \rangle [23]^2}{\langle 24 \rangle [34]\langle 56 \rangle \langle 1|2+4|3 \rangle^2} + \\
& \frac{-3/4[24]\langle 36 \rangle^2\langle 24 \rangle [23]^2}{[34]\langle 56 \rangle (1|2+4|3)\langle 3|5+6|3 \rangle^2} + \\
& \frac{7/8\langle 46 \rangle [35]\langle 14 \rangle^2[24][14]^2\langle 24 \rangle^2[34] \dots \langle 57 \text{ terms} \rangle \dots -3/8\langle 23 \rangle [35][24][23]^2\langle 26 \rangle \langle 24 \rangle^2\langle 12 \rangle [12]}{\langle 12 \rangle [13]\langle 24 \rangle [34]\langle 56 \rangle [56](1|2+4|3)\langle 2|1+4|3 \rangle \langle 3|5+6|3 \rangle} + \\
& \frac{-27/8[35][23]\langle 24 \rangle \langle 26 \rangle \langle 12 \rangle^2[12]^2 \dots \langle 20 \text{ terms} \rangle \dots -1/2\langle 46 \rangle [35][24]^2\langle 24 \rangle^3[34]}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle [13][34][56](1|2+4|3)\langle 2|1+4|3 \rangle} + \\
& \frac{\langle 46 \rangle (-1/8\langle 14 \rangle \langle 46 \rangle \langle 34 \rangle [34]^2 \dots \langle 5 \text{ terms} \rangle \dots -3/8\langle 14 \rangle [24][23]\langle 26 \rangle \langle 24 \rangle)}{\langle 12 \rangle \langle 24 \rangle [34]\langle 56 \rangle \langle 1|2+4|3 \rangle \langle 4|1+2|3 \rangle} + \\
& \frac{\langle 14 \rangle [35](1/2\langle 14 \rangle [45][13]\langle 34 \rangle -1/2\langle 14 \rangle [35][14]\langle 34 \rangle +1/8[24]\langle 24 \rangle \langle 34 \rangle [35]+3/8[24]\langle 24 \rangle^2[25])}{\langle 12 \rangle \langle 24 \rangle [34][56](1|2+4|3)\langle 4|1+2|3 \rangle} + \\
& \frac{5/12[45]\langle 13 \rangle [14][23]\langle 26 \rangle}{[34](1|2+4|3)\langle 2|1+3|4 \rangle^2} + \\
& \frac{77/36\langle 23 \rangle [45]^2(s_{14}-s_{23})[23]}{[34][56](1|2+4|3)\langle 2|1+3|4 \rangle^2} + \\
& \frac{-3/4\langle 6|1+5|3 \rangle \langle 36 \rangle [12][23]}{[13][34]\langle 56 \rangle (1|2+4|3)\langle 3|2+4|3 \rangle} + \\
& \frac{-35/8\langle 36 \rangle \langle 6|1+5|2 \rangle [23]}{[34]\langle 56 \rangle (1|2+4|3)\langle 3|2+4|3 \rangle} + \\
& \frac{3/4\langle 4|2+3|4 \rangle [13]\langle 36 \rangle^2[23]}{[34]\langle 56 \rangle \langle 2|1+4|3 \rangle \langle 3|5+6|3 \rangle^2} + \\
& \frac{9/8\langle 3|2+4|3 \rangle \langle 26 \rangle^2(s_{13}-s_{24})[23]}{\langle 12 \rangle [34]\langle 56 \rangle \langle 2|1+4|3 \rangle^2\langle 3|5+6|3 \rangle} + \\
& \frac{-9/8\langle 23 \rangle \langle 3|2+4|3 \rangle (s_{13}-s_{24})[35]^2}{\langle 12 \rangle [34][56]\langle 2|1+4|3 \rangle^2\langle 3|5+6|3 \rangle} + \\
& \frac{1/4\langle 46 \rangle^2[24][13][23]\langle 34 \rangle \langle 4|5+6|4 \rangle}{[34]\langle 56 \rangle \langle 4|1+2|3 \rangle^2(\langle 2|3|5+6|4|2 \rangle -\langle 3|1|5+6|4|3 \rangle)} + \\
& \frac{[45][14](-5/12\langle 23 \rangle [25]+1/12\langle 13 \rangle [15])}{[34][56]\langle 2|1+3|4 \rangle^2} + \\
& \frac{\langle 23 \rangle \langle 26 \rangle (-3/8\langle 23 \rangle \langle 46 \rangle [24][13]-5/8\langle 23 \rangle [13]\langle 36 \rangle [23]-1/4[24]\langle 26 \rangle [12]\langle 24 \rangle +1/8\langle 12 \rangle \langle 26 \rangle [12]^2)}{\langle 12 \rangle \langle 24 \rangle [34]\langle 56 \rangle \langle 2|3+4|1 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-1/4\langle 23 \rangle^2[45][15][23]}{\langle 12 \rangle [34][56]\langle 2|3+4|1 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 26 \rangle (11/8[13]\langle 36 \rangle \langle 34 \rangle +11/8\langle 46 \rangle [14]\langle 34 \rangle -3/8\langle 23 \rangle \langle 46 \rangle [12]+7/8\langle 36 \rangle [12]\langle 24 \rangle)}{\langle 12 \rangle \langle 24 \rangle [34]\langle 56 \rangle \langle 2|3+4|1 \rangle} + \\
& \frac{-1/2\langle 23 \rangle [15][25]}{\langle 12 \rangle [34][56]\langle 2|3+4|1 \rangle} + \\
& \frac{3/16\langle 3|2+4|1 \rangle [35]\langle 14 \rangle [24](s_{14}-s_{23})\langle 16 \rangle}{\Delta_{13}24|56(1|2+4|3)^2\langle 2|1+3|4 \rangle} + \\
& \frac{(s_{14}-s_{23})(s_{124}-s_{234})(-11/48\langle 14 \rangle [14][25]\langle 16 \rangle \dots \langle 4 \text{ terms} \rangle \dots -13/48\langle 14 \rangle [45]\langle 36 \rangle [23])}{\Delta_{13}24|56(1|2+4|3)^2\langle 2|1+3|4 \rangle} + \\
& \frac{1/24\langle 3|2+4|1 \rangle [35]\langle 14 \rangle [24](s_{124}-s_{234})\langle 16 \rangle}{\Delta_{13}24|56(1|2+4|3)^2\langle 2|1+3|4 \rangle} + \\
& \frac{1/8\langle 14 \rangle^2[24]\langle 26 \rangle \langle 46 \rangle}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle (1|2+4|3)^2} + \\
& \frac{\langle 14 \rangle [25](s_{124}-s_{234})(-13/48\langle 36 \rangle [23]-7/48[12]\langle 16 \rangle)}{\Delta_{13}24|56(1|2+4|3)^2} + \\
& \frac{5/48\langle 6|1+3|5 \rangle (s_{123}-s_{134})\langle 13 \rangle [14](s_{14}-s_{23})}{\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle^2} + \\
& \frac{-1/48\langle 23 \rangle \langle 6|1+3|5 \rangle [24](s_{123}-s_{134})(s_{14}-s_{23})}{\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle^2} + \\
& \frac{-5/48[45]\langle 13 \rangle (s_{123}-s_{134})[14]\langle 26 \rangle \langle 4|1+3|2 \rangle}{\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle^2} + \\
& \frac{-1/16[35]\langle 13 \rangle [14][25]\langle 24 \rangle (s_{15}+s_{35}+s_{16}+s_{36})[12]}{[13][56]\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{7/48[35]\langle 13 \rangle \langle 26 \rangle [12]^2(s_{14}-s_{23})}{[13]\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{-19/48\langle 6|1+3|5 \rangle [12](s_{14}-s_{23})(s_{15}+s_{35}+s_{16}+s_{36})}{[13]\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{\langle 6|1+3|5 \rangle [12](s_{15}+s_{35}+s_{16}+s_{36})(-5/16\langle 14 \rangle [14]-7/12\langle 34 \rangle [34])}{[13]\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{1/48\langle 46 \rangle [35]\langle 13 \rangle [14](s_{15}+s_{35}+s_{16}+s_{36})[12]}{[13]\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{-1/16\langle 23 \rangle \langle 46 \rangle^2(s_{25}+s_{45}+s_{26}+s_{46})[24]\langle 3|2+4|3 \rangle}{\langle 24 \rangle \langle 56 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{-1/48\langle 46 \rangle [24][13][45]\langle 34 \rangle^2\langle 12 \rangle}{\langle 24 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{5/16\langle 46 \rangle (s_{25}+s_{45}+s_{26}+s_{46})[45]\langle 3|2+4|3 \rangle \langle 34 \rangle}{\langle 24 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{\langle 34 \rangle \langle 46 \rangle (s_{25}+s_{45}+s_{26}+s_{46})(1/8\langle 23 \rangle [24][35]-1/3\langle 14 \rangle [45][14]-5/16\langle 12 \rangle [14][25])}{\langle 24 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{\langle 46 \rangle (s_{13}-s_{24})(1/16[13][24]\langle 13 \rangle \langle 36 \rangle \dots \langle 3 \text{ terms} \rangle \dots +1/16\langle 36 \rangle \langle 13 \rangle [12][34])}{\langle 56 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{[45](s_{13}-s_{24})(-1/16[24]\langle 34 \rangle^2[35]-1/16[24]\langle 24 \rangle \langle 34 \rangle [25]+1/16\langle 14 \rangle \langle 13 \rangle [12][15])}{\langle 56 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{1/16\langle 23 \rangle [35]\langle 13 \rangle [25](s_{13}-s_{24})[12]}{\langle 56 \rangle \Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{1/2\langle 14 \rangle^2\langle 36 \rangle [14]^2[25] \dots \langle 53 \text{ terms} \rangle \dots +11/8\langle 23 \rangle \langle 13 \rangle [25][23]\langle 26 \rangle [12]}{\Delta_{13}24|56(1|2+4|3)\langle 2|1+3|4 \rangle} + \\
& \frac{-7/48\langle 46 \rangle \langle 13 \rangle [12]^2[35]}{[13]\Delta_{13}24|56(1|2+4|3)} + \\
& \frac{1/48\langle 14 \rangle \langle 6|2+4|1 \rangle \langle 34 \rangle [25]}{\langle 24 \rangle \Delta_{13}24|56(1|2+4|3)} + \\
& \frac{\langle 26 \rangle (-11/8\langle 23 \rangle \langle 46 \rangle [14]\langle 34 \rangle +3/8\langle 23 \rangle^2\langle 46 \rangle [12]+13/8\langle 36 \rangle \langle 24 \rangle [14]\langle 34 \rangle -1/2\langle 23 \rangle \langle 36 \rangle [12]\langle 24 \rangle)}{\langle 12 \rangle \langle 24 \rangle \langle 56 \rangle \langle 2|3+4|1 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{\langle 23 \rangle [15](1/2\langle 23 \rangle [25]-1/4[45]\langle 34 \rangle)}{\langle 12 \rangle [56]\langle 2|3+4|1 \rangle \langle 2|1+3|4 \rangle} + \\
& \frac{-7/48\langle 26 \rangle \langle 13 \rangle [12]^2[15]}{[13]\Delta_{13}24|56(1|2+4|3)}
\end{aligned}$$