$$\frac{3(s_{124}-s_{134})(s_{24}-s_{13})\langle 34\rangle\langle 26\rangle[35][13]}{\langle 2|1+4|3]^3\Delta_{14|23|56}}+$$

$$\frac{\langle 24\rangle\langle 26\rangle[35][27/2\langle 13\rangle[13]+3/2\langle 34\rangle[34]]}{\langle 12\rangle\langle 2|1+4|3]^3}+$$

$$\frac{1\langle 46\rangle\langle 34\rangle(s_{13}+s_{34})(s_{13}-s_{34})[35]}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{\langle 46\rangle(s_{23}-s_{56})\langle 24\rangle(1\langle 13\rangle[25][13]-1/2\langle 13\rangle[35][12]-1/2\langle 34\rangle[45][23])}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{\langle 24\rangle\langle 34\rangle(s_{12}+s_{13}+s_{24}+s_{34})\langle 36\rangle(-1/2\langle 35\rangle\langle 24\rangle[24]+1/2[45][23]\langle 24\rangle-1/2\langle 34\rangle[34][35])}{\langle 14\rangle\langle 23\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{\langle 24\rangle[13](s_{14}-s_{56})\langle 36\rangle^2(1\langle 13\rangle[13]-1/2\langle 24\rangle[24]+1/2\langle 34\rangle[34])}{\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{\langle 46\rangle(-1[23][13]\langle 36\rangle\langle 23\rangle\langle 24\rangle[24]\ldots(4\ \mathrm{terms})\ldots-1/4\langle 46\rangle\langle 13\rangle^2[13]^2[14])}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{-1/2\langle 23\rangle^2\langle 36\rangle^2\langle 23\rangle\langle 24\rangle[13]}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{(s_{14}-s_{23})\langle 46\rangle(9/4\langle 36\rangle^2\langle 24\rangle[13]\ldots(5\ \mathrm{terms})\ldots-11/4[34]\langle 24\rangle\langle 36\rangle[12])}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]^2}+$$

$$\frac{(s_{124}-s_{134})(29/2\langle 46\rangle[25]\langle 25\rangle[15]\ldots(3\ \mathrm{terms})\ldots+6\langle 46\rangle[25]\langle 24\rangle[14])}{\langle 2|1+4|3]^2\Delta_{14|23|56}}+$$

$$\frac{4\langle 46\rangle\langle 23\rangle\langle 45\rangle[25][35][14]\ldots(41\ \mathrm{terms})\ldots+2[23]\langle 36\rangle\langle 34\rangle\langle 24\rangle[45][13]}{\langle 2|1+4|3]^2\Delta_{14|23|56}}$$

$$\frac{-53/12\langle 26\rangle\langle 13\rangle^2[35]\langle 24\rangle^2}{\langle 12\rangle^2\langle 14\rangle\langle 23\rangle\langle 2|1+4|3]^2}+$$

$$\frac{\langle 13\rangle\langle 24\rangle\langle 26\rangle^2(-5/3\langle 26\rangle[26]-5/3[25]\langle 25\rangle)}{\langle 12\rangle^2\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]^2}+$$

$$\frac{-20/3\langle 13\rangle[35]\langle 24\rangle^2\langle 36\rangle\ldots(9\ \mathrm{terms})\ldots+29/3[56]\langle 23\rangle\langle 12\rangle\langle 46\rangle^2}{\langle 12\rangle\langle 14\rangle\langle 23\rangle\langle 2|1+4|3]^2}+$$

$$\frac{\langle 46\rangle(-1\langle 46\rangle\langle 23\rangle\langle 13\rangle\langle 24\rangle[34]\ldots(12\ \mathrm{terms})\ldots-5/3\langle 14\rangle\langle 36\rangle\langle 24\rangle[45]\langle 25\rangle)}{\langle 12\rangle\langle 14\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]^2}+$$

$$\frac{\langle 24\rangle\langle 36\rangle(-2\langle 34\rangle\langle 24\rangle\langle 36\rangle+5/3\langle 26\rangle^2[26]+5/3\langle 26\rangle[25]\langle 25\rangle)}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]^2}+$$

$$\frac{2[23]\langle 6|1+4|5](13\rangle\langle 24\rangle\langle 4|2+3|1|\langle 3|1+4|2]}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 46\rangle(s_{23}-s_{56})\langle 3|1+4|2]\langle 4|2+3|1](3/4\langle 13\rangle[35]+7/8[56]\langle 16\rangle)}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 24\rangle\langle 46\rangle(s_{23}-s_{56})\langle 3|1+4|2](7/8[56]\langle 25\rangle[56]-1/2\langle 34\rangle[45][23]+7/8[56]\langle 23\rangle[36])}{\langle 14\rangle\Delta_{14|23|56}^2\langle 2|1+4|3]}+$$

$$\frac{-3/8\langle 13\rangle\langle 26\rangle[15](s_{25}+s_{26}+s_{35}+s_{36})\langle 4|2+3|1|\langle 3|1+4|2]}{\langle 23\rangle\Delta_{14|23|56}^2\langle 2|1+4|3]}+$$

$$\frac{3/8\langle 3|1+2|4|\langle 46\rangle\langle 26\rangle\langle 4|2+3|1|(s_{25}+s_{26}+s_{35}+s_{36})\langle 3|1+4|2]}{\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]\Delta_{14|23|56}^2}+$$

$$\frac{\langle 4|2+3|1|\langle 3|1+4|2|(1/16\langle 16\rangle\langle 12\rangle[15][12]\ldots(8\ \mathrm{terms})\ldots+77/16\langle 46\rangle\langle 24\rangle[24][45])}{\Delta_{14|23|56}^2\langle 2|1+4|3]}+$$

$$\frac{\langle 46\rangle(s_{123}-s_{234})\langle 3|1+4|2](3/4\langle 23\rangle[35][12]+7/4\langle 13\rangle[15][13])}{\Delta_{14|23|56}^2\langle 2|1+4|3]}+$$

$$\frac{\langle 3|1+4|2|(-7/4\langle 24\rangle^2[12]\langle 26\rangle[25]\langle 24]\ldots(9\ \mathrm{terms})\ldots-1/2\langle 46\rangle\langle 13\rangle\langle 24\rangle[12][35][14])}{\Delta_{14|23|56}^2\langle 2|1+4|3]}+$$

$$\frac{-5/4(s_{124}-s_{134})\langle 36\rangle\langle 4|1+3|2|\langle 4|2+3|1|[45]}{\langle 2|1+4|3]\Delta_{14|23|56}^2}+$$

$$\frac{-1/4\langle 46\rangle^2(s_{23}-s_{56})\langle 34\rangle\langle 13\rangle\langle 2|1+4|2]}{\langle 14\rangle^2\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-1/2\langle 46\rangle^2[23]\langle 13\rangle\langle 24\rangle\langle 3|1+4|2]}{\langle 14\rangle^2\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-1/2\langle 46\rangle^2[23](s_{23}-s_{56})\langle 34\rangle\langle 13\rangle}{\langle 14\rangle^2\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle\langle 2\langle 34\rangle[35][24]\ldots(3\ \mathrm{terms})\ldots+8\langle 12\rangle[25][12])}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle(1/4\langle 34\rangle^2[45][34]+1/2\langle 34\rangle\langle 13\rangle[45][13]+3/4\langle 34\rangle\langle 12\rangle[25][14]-1/4\langle 13\rangle^2[15][13])}{\langle 14\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle\langle 36\rangle(1\langle 13\rangle\langle 24\rangle[24][13]-1\langle 34\rangle\langle 12\rangle[34][12])}{\langle 14\rangle\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 34\rangle(s_{23}-s_{56})(3/4\langle 25\rangle\langle 24\rangle\langle 36\rangle-1/4\langle 23\rangle[25]\langle 46\rangle+1/2\langle 34\rangle[35]\langle 36\rangle)}{\langle 14\rangle\langle 23\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 13\rangle(s_{23}-s_{56})\langle 46\rangle(-1/2\langle 34\rangle\langle 36\rangle[13]+1/2\langle 34\rangle\langle 46\rangle[14]+1/2\langle 23\rangle\langle 46\rangle[12])}{\langle 14\rangle\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-1/4\langle 34\rangle^2[25][35]\langle 24\rangle(s_{23}-s_{56})}{\langle 14\rangle[56]\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 34\rangle(1/4\langle 36\rangle[25]\langle 24\rangle[14]\ldots(5\ \mathrm{terms})\ldots+1/4\langle 34\rangle[45][14]\langle 46\rangle)}{\langle 23\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{\langle 36\rangle\langle 34\rangle(5/4\langle 36\rangle[24]\langle 24\rangle[13]+7/4\langle 46\rangle[24]\langle 24\rangle[14]+3/4\langle 34\rangle\langle 46\rangle[34][14]-5/4\langle 34\rangle\langle 24\rangle\langle 36\rangle[12])}{\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-1/4\langle 34\rangle^3[45][35][14]}{\langle 23\rangle[56]\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-1/2\langle 34\rangle[15](s_{14}-s_{56})\langle 36\rangle}{\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{-3/2\langle 46\rangle\langle 36\rangle\langle 34\rangle(s_{14}-s_{56})[14]}{\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{[12]\langle 46\rangle(-11/4\langle 34\rangle\langle 34\rangle\langle 36\rangle\ldots(3\ \mathrm{terms})\ldots-1\langle 13\rangle\langle 36\rangle[13])}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{1/4\langle 14\rangle\langle 36\rangle^2[13][12]}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{1/4(s_{14}-s_{23})\langle 46\rangle\langle 36\rangle[12]}{\langle 56\rangle\Delta_{14|23|56}\langle 2|1+4|3]}+$$

$$\frac{1/2\langle 35\rangle\langle 46\rangle[25][15]+27/2\langle 34\rangle\langle 25\rangle\langle 36\rangle[13]-18\langle 34\rangle[35]\langle 36\rangle[12]}{\langle 2|1+4|3]\Delta_{14|23|56}}+$$

$$\frac{\langle 26\rangle(-5/3\langle 23\rangle\langle 13\rangle[35][13]+5/3\langle 45\rangle\langle 24\rangle^2[24])}{\langle 12\rangle^2[34]\langle 2|3+4|1]\langle 2|1+4|3]}+$$

$$\frac{-5/3\langle 26\rangle^2\langle 24\rangle^2[24]^2}{\langle 12\rangle^2[34]\langle 56\rangle\langle 2|3+4|1]\langle 2|1+4|3]}+$$

$$\frac{10/3\langle 26\rangle^2\langle 13\rangle\langle 24\rangle[13]^2}{\langle 12\rangle[34]^2\langle 56\rangle\langle 2|3+4|1]\langle 2|1+4|3]}+$$

$$\frac{\langle 26\rangle(7/3\langle 23\rangle[25]\langle 24\rangle[14]\ldots(3\ \mathrm{terms})\ldots+1/3\langle 23\rangle\langle 12\rangle[15][12])}{\langle 12\rangle\langle 23\rangle[34]\langle 2|3+4|1]\langle 2|1+4|3]}+$$

$$\frac{\langle 26\rangle(3/4\langle 23\rangle^2\langle 46\rangle\langle 24\rangle[13]-2\langle 36\rangle\langle 23\rangle\langle 34\rangle\langle 34\rangle[13]-2\langle 34\rangle\langle 12\rangle\langle 14\rangle^2\langle 46\rangle+3/4\langle 36\rangle\langle 24\rangle\langle 24\rangle^2[14])}{\langle 12\rangle\langle 23\rangle[34]\langle 56\rangle\langle 2|3+4|1]\langle 2|1+4|3]}+$$

$$\frac{83/12\langle 36\rangle^2\langle 34\rangle\langle 12\rangle^2[36][35]\ldots(48\ \mathrm{terms})\ldots+15/4\langle 14\rangle\langle 13\rangle\langle 24\rangle\langle 26\rangle[56][45]\langle 56\rangle}{\langle 12\rangle^2\langle 14\rangle\langle 23\rangle[34]\langle 56\rangle[56]\langle 2|1+4|3]}+$$

$$\frac{\langle 26\rangle^2\langle 13\rangle\langle 24\rangle(-19/12\langle 26\rangle[36]-19/12[35]\langle 25\rangle)}{\langle 12\rangle^2\langle 23\rangle[34]^2\langle 56\rangle\langle 2|1+4|3]}+$$

$$\frac{-1\langle 6|1+5|3]\langle 13\rangle\langle 24\rangle\langle 16\rangle}{\langle 12\rangle^2\langle 56\rangle\langle 1|2+4|3]\langle 2|1+4|3]}+$$

$$\frac{-2/3\langle 46\rangle^2[34]\langle 13\rangle^2}{\langle 12\rangle\langle 14\rangle\langle 56\rangle\langle 1|2+3|4]\langle 2|1+4|3]}+$$

$$\frac{-1[35]^2\langle 24\rangle\langle 24\rangle\langle 1|3+4|2]}{\langle 12\rangle[23][34][56]\langle 1|2+4|3]\langle 2|1+4|3]}+$$

$$\frac{1[35]^2\langle 14\rangle\langle 24\rangle\langle 24\rangle^2}{\langle 12\rangle[23][34][56]\langle 1|2+4|3]\langle 2|1+4|3]}+$$

$$\frac{-1\langle 6|1+5|3]\langle 24\rangle\langle 24\rangle\langle 16\rangle}{\langle 12\rangle[34]\langle 56\rangle\langle 1|2+4|3]\langle 2|1+4|3]}+$$

$$\frac{2/3\langle 3|1+4|3]\langle 13\rangle^2\langle 46\rangle^2}{\langle 14\rangle^2\langle 23\rangle\langle 56\rangle\langle 1|2+3|4]\langle 2|1+4|3]}+$$

$$\frac{-1\langle 13\rangle^2(s_{13}-s_{24})\langle 46\rangle^2}{\langle 14\rangle^2\langle 23\rangle\langle 56\rangle\langle 1|2+3|4]\langle 2|1+4|3]}+$$

$$\frac{-10/3\langle 23\rangle[15]^2\langle 14\rangle[14]}{\langle 12\rangle[34][56]\langle 2|3+4|1]^2}+$$

$$\frac{2/3[15]^2\langle 3|2+4|1]}{[34][56]\langle 2|3+4|1]^2}+$$

$$\frac{-3/2\langle 34\rangle[15]^2[14]}{[34][56]\langle 2|3+4|1]^2}+$$

$$\frac{\langle 26\rangle(-5/3\langle 26\rangle\langle 13\rangle[12]-5/3\langle 13\rangle[14]\langle 46\rangle+5/3\langle 36\rangle\langle 24\rangle[24])}{\langle 12\rangle^2[34]\langle 56\rangle\langle 2|3+4|1]}+$$

$$\frac{\langle 26\rangle(-19/12\langle 34\rangle[45][14]-2/3\langle 23\rangle[45][12]+2/3\langle 23\rangle[25][14])}{\langle 12\rangle\langle 23\rangle[34]^2\langle 2|3+4|1]}+$$

$$\frac{[14]^2\langle 26\rangle(19/12\langle 14\rangle\langle 36\rangle-19/12\langle 13\rangle\langle 46\rangle)}{\langle 12\rangle\langle 23\rangle[34]^2\langle 56\rangle\langle 2|3+4|1]}+$$

$$\frac{\langle 36\rangle\langle 26\rangle(-5/12\langle 34\rangle[14]+5/3\langle 23\rangle[12])}{\langle 12\rangle\langle 23\rangle[34]\langle 56\rangle\langle 2|3+4|1]}+$$

$$\frac{-1/4\langle 13\rangle^2\langle 24\rangle\langle 46\rangle[45]\ldots(6\ \mathrm{terms})\ldots+47/12\langle 36\rangle\langle 34\rangle\langle 13\rangle\langle 12\rangle[35]}{\langle 12\rangle^2\langle 14\rangle\langle 23\rangle[34]\langle 56\rangle[56]}+$$

$$\frac{\langle 13\rangle^2(1\langle 46\rangle\langle 13\rangle\langle 24\rangle[45]-2/3[56]\langle 26\rangle\langle 46\rangle\langle 13\rangle+1[56]\langle 26\rangle\langle 14\rangle\langle 36\rangle-1[45]\langle 14\rangle\langle 24\rangle\langle 36\rangle)}{\langle 12\rangle^2\langle 14\rangle\langle 23\rangle\langle 56\rangle[56]\langle 1|2+3|4]}+$$

$$(123456\to\overline{132165})+$$

$$\frac{5/2(s_{24}-s_{13})(s_{124}-s_{134})\langle 26\rangle\langle 4|2+3|1|[35]\langle 3|1+4|2]}{\Delta_{14|23|56}^2\langle 2|1+4|3]^2}+$$

$$\frac{35/64(s_{123}-s_{234})(s_{124}-s_{134})\langle 6|1+4|5|\langle 4|2+3|1|(s_{25}+s_{26}+s_{35}+s_{36})\langle 3|1+4|2]}{\Delta_{14|23|56}^3\langle 2|1+4|3]}$$