$$\frac{-3/2\langle 34\rangle\langle 3|1+2|3]\langle 36\rangle^2 s_{123}}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 3|5+6|3]^3}+$$

$$\frac{[34]\langle 34\rangle\langle 36\rangle s_{123}(3/4\langle 23\rangle\langle 46\rangle+1/2\langle 24\rangle\langle 36\rangle)}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]\langle 3|5+6|3]^2}+$$

$$\frac{1/4\langle 34\rangle^2[35]\langle 45\rangle s_{123}}{\langle 12\rangle[56]\langle 2|1+4|3]\langle 3|5+6|3]^2}+$$

$$\frac{-1/4\langle 34\rangle\langle 36\rangle^2 s_{123}}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 3|5+6|3]^2}+$$

$$\frac{3\langle 34\rangle[35]s_{123}\langle 26\rangle[13]}{\langle 2|1+4|3]^3\langle 3|5+6|3]}+$$

$$\frac{[34]\langle 34\rangle\langle 26\rangle s_{123}(-3/2\langle 23\rangle\langle 46\rangle+2\langle 24\rangle\langle 36\rangle)}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]^2\langle 3|5+6|3]}+$$

$$\frac{\langle 34\rangle[35]s_{123}(-1/2\langle 24\rangle[45]-1/2\langle 23\rangle[35])}{\langle 12\rangle[56]\langle 2|1+4|3]^2\langle 3|5+6|3]}+$$

$$\frac{\langle 46\rangle(-3/4\langle 24\rangle\langle 34\rangle[14]\langle 12\rangle\langle 36\rangle[13]\ldots\langle\!\langle 5\,\text{terms}\rangle\!\rangle\ldots+3\langle 24\rangle^2\langle 36\rangle[13]\langle 23\rangle[24])}{\langle 12\rangle[13]\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 2|1+4|3]\langle 3|5+6|3]}+$$

$$\frac{\langle 34\rangle^2[35](9/4\langle 24\rangle\langle 12\rangle[15][14]+17/4[13]\langle 12\rangle\langle 23\rangle[15]+2\langle 24\rangle\langle 23\rangle[35][14])}{\langle 12\rangle[13]\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 2|1+4|3]\langle 3|5+6|3]}+$$

$$\frac{-5/4[13]\langle 34\rangle\langle 4|5+6|4]\langle 46\rangle^2}{\langle 24\rangle\langle 56\rangle\langle 2|1+4|3]\langle 3|5+6|3]\langle 4|1+2|3]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle(-3/4\langle 24\rangle\langle 36\rangle[14]+5/4[13]\langle 23\rangle\langle 36\rangle-9/4[14]\langle 23\rangle\langle 46\rangle+3/4\langle 26\rangle\langle 23\rangle[12])}{\langle 12\rangle[13]\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 3|5+6|3]}+$$

$$\frac{\langle 36\rangle\langle 34\rangle(-2[13]\langle 36\rangle+9/4\langle 26\rangle[12])}{\langle 12\rangle[13]\langle 23\rangle\langle 56\rangle\langle 3|5+6|3]}+$$

$$\frac{9/4\langle 34\rangle^2[15][45]}{\langle 12\rangle[13]\langle 23\rangle[56]\langle 3|5+6|3]}+$$

$$\frac{17/4\langle 34\rangle^2[15][35]}{\langle 12\rangle[13]\langle 24\rangle[56]\langle 3|5+6|3]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle^2(-5/4[13][13]-5/4\langle 4\rangle[23]+3/4[12][12])}{\langle 12\rangle\langle 24\rangle\langle 56\rangle\langle 3|5+6|3]\langle 4|1+2|3]}+$$

$$\frac{1\langle 26\rangle^2\langle 34\rangle s_{123}}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]^2}+$$

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

$$\frac{-17/4\langle 24\rangle\langle 36\rangle^2}{\langle 12\rangle\langle 23\rangle\langle 56\rangle\langle 2|1+4|3]}+$$

$$\frac{-115/72\langle 24\rangle\langle 13\rangle[15]^2[12]^2}{[13]^2\langle 23\rangle[56]\langle 1|2+3|1]\langle 1|5+6|1]}+$$

$$\frac{[12]\langle 16\rangle(-2[14]^2\langle 12\rangle\langle 46\rangle\langle 34\rangle\ldots\langle\!\langle 7\,\text{terms}\rangle\!\rangle\ldots-2\langle 26\rangle\langle 12\rangle\langle 23\rangle[12]^2)}{\langle 12\rangle[13]^2\langle 23\rangle\langle 56\rangle\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{\langle 46\rangle(-41/12\langle 36\rangle\langle 23\rangle^2[13][23][24]\ldots\langle\!\langle 23\,\text{terms}\rangle\!\rangle\ldots-1/2[14]^2\langle 13\rangle\langle 12\rangle\langle 46\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle\langle 56\rangle\langle 1|2+3|4]\langle 4|2+3|4]}+$$

$$\frac{[45](-115/72\langle 34\rangle^2[35][13]\langle 23\rangle[24]\ldots\langle\!\langle 14\,\text{terms}\rangle\!\rangle\ldots+1/2[14]\langle 34\rangle^2\langle 12\rangle[13][25])}{\langle 12\rangle[13]^2\langle 23\rangle[56]\langle 1|2+3|4]\langle 4|2+3|4]}+$$

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

$$\frac{[45](2\langle 24\rangle\langle 34\rangle^2[14][35][24]\ldots\langle\!\langle 7\,\text{terms}\rangle\!\rangle\ldots+1/2\langle 13\rangle\langle 34\rangle^2[13]^2[45])}{\langle 12\rangle[13]^2\langle 23\rangle[56]\langle 1|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{\langle 34\rangle\langle 46\rangle(-1/12\langle 24\rangle[34]\langle 36\rangle[13]\langle 23\rangle[12]\ldots\langle\!\langle 8\,\text{terms}\rangle\!\rangle\ldots+2[14]\langle 12\rangle\langle 46\rangle[13]\langle 23\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 4|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{\langle 46\rangle(65/12[13]\langle 34\rangle\langle 36\rangle[14]\ldots\langle\!\langle 3\,\text{terms}\rangle\!\rangle\ldots+7/2\langle 24\rangle\langle 36\rangle[12][14])}{\langle 12\rangle[13]^2\langle 23\rangle\langle 56\rangle\langle 4|2+3|4]}+$$

$$\frac{\langle 36\rangle(1\langle 24\rangle\langle 26\rangle[12]^2+41/12[13]^2\langle 34\rangle\langle 36\rangle+53/12\langle 24\rangle[13]\langle 36\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle\langle 56\rangle\langle 4|2+3|4]}+$$

$$\frac{\langle 34\rangle[15][35](2[14]\langle 34\rangle+2\langle 23\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle[56]\langle 4|2+3|4]}+$$

$$\frac{\langle 34\rangle[15][45](325/72[13]\langle 34\rangle-7/72\langle 24\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle[56]\langle 4|2+3|4]}+$$

$$\frac{[15][25](-83/12[13]\langle 34\rangle\langle 23\rangle+2\langle 24\rangle\langle 34\rangle[14]+1\langle 24\rangle\langle 23\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle[56]\langle 4|2+3|4]}+$$

$$\frac{-61/9\langle 24\rangle\langle 46\rangle^2[34][12]^2}{\langle 12\rangle[13]^2[56]\langle 4|1+2|3]\langle 4|5+6|4]}+$$

$$\frac{\langle 46\rangle(2\langle 24\rangle\langle 34\rangle\langle 46\rangle[14]^2\ldots\langle\!\langle 5\,\text{terms}\rangle\!\rangle\ldots+3/2[13]\langle 23\rangle^2\langle 46\rangle[12])}{\langle 12\rangle[13]^2\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 4|5+6|4]}+$$

$$\frac{-47/36\langle 13\rangle^2[23][15]^2[12]}{[13][56]\langle 1|2+3|1]\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{-41/12\langle 13\rangle^2[15]^2[12]}{[13]\langle 23\rangle[56]\langle 1|2+3|1]\langle 1|2+3|4]}+$$

$$\frac{\langle 24\rangle\langle 13\rangle\langle 16\rangle[12][24](-151/72[13]\langle 36\rangle-115/72[14]\langle 46\rangle)}{\langle 12\rangle[13]\langle 23\rangle[23]\langle 56\rangle\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{[12]\langle 16\rangle(-35/12[13]\langle 13\rangle\langle 46\rangle[24]+41/12[13]\langle 13\rangle[12]\langle 16\rangle+151/72[13]\langle 36\rangle\langle 14\rangle[24]+1/2[14]\langle 16\rangle[12]\langle 14\rangle)}{\langle 12\rangle[13][23]\langle 56\rangle\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{47/36\langle 13\rangle^2[15][12][35]}{\langle 12\rangle[13][56]\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{\langle 34\rangle[12]\langle 16\rangle(151/72[13]\langle 36\rangle+115/72[14]\langle 46\rangle)}{\langle 12\rangle[13]\langle 23\rangle[23]\langle 56\rangle\langle 1|5+6|1]}+$$

$$\frac{-115/72\langle 46\rangle[12]^2\langle 16\rangle}{\langle 12\rangle[13][23][23]\langle 56\rangle\langle 1|5+6|1]}+$$

$$\frac{\langle 46\rangle[24][12](-5/2\langle 13\rangle\langle 46\rangle[34]-151/72[34]\langle 36\rangle\langle 14\rangle-115/72\langle 26\rangle\langle 14\rangle[24]-1/2[14]\langle 16\rangle\langle 14\rangle)}{\langle 12\rangle[13][23]\langle 56\rangle\langle 1|2+3|4]\langle 4|2+3|4]}+$$

$$\frac{41/12\langle 3|1+2|3]\langle 46\rangle\langle 36\rangle[24]}{\langle 12\rangle[13]\langle 56\rangle\langle 1|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{41/12\langle 46\rangle\langle 6|1+4|2][12][24]}{[13][23]\langle 56\rangle\langle 1|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{[14]\langle 34\rangle^2\langle 46\rangle(-5/2[14]\langle 34\rangle[13]\langle 46\rangle-1/2[13]^2\langle 34\rangle\langle 36\rangle+1/2\langle 24\rangle\langle 26\rangle[12]^2)}{[13]\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 4|2+3|1]\langle 4|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{2[14]\langle 34\rangle^2[45]\langle 4|1+6|5]}{\langle 12\rangle[13]\langle 23\rangle[56]\langle 4|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{67/8\langle 46\rangle^2[12][24]}{\langle 12\rangle[13][23]\langle 56\rangle\langle 4|2+3|4]}+$$

$$\frac{\langle 46\rangle(3/2\langle 24\rangle\langle 46\rangle[12]-131/18[14]\langle 34\rangle\langle 46\rangle-1/2[13]\langle 34\rangle\langle 36\rangle)}{\langle 12\rangle[13]\langle 24\rangle\langle 56\rangle\langle 4|2+3|4]}+$$

$$\frac{-41/12\langle 46\rangle\langle 6|1+4|2][12]}{\langle 12\rangle[13][23]\langle 56\rangle\langle 4|5+6|4]}+$$

$$\frac{-47/36[45][14]\langle 13\rangle^2[15][12]}{\langle 12\rangle[56]\langle 1|2+3|1]\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{151/72\langle 34\rangle\langle 13\rangle^2[15]^2}{\langle 12\rangle\langle 23\rangle[56]\langle 1|2+3|1]\langle 1|5+6|1]}+$$

$$\frac{-35/12\langle 14\rangle\langle 13\rangle[15][25][12]}{\langle 12\rangle[23][56]\langle 1|2+3|1]\langle 1|5+6|1]}+$$

$$\frac{151/72\langle 34\rangle\langle 13\rangle[24]\langle 16\rangle\langle 6|2+5|1]}{\langle 12\rangle\langle 23\rangle[23]\langle 56\rangle\langle 1|5+6|1]\langle 1|2+3|4]}+$$

$$\frac{1/2[14]\langle 34\rangle^2\langle 16\rangle\langle 46\rangle[12]}{\langle 12\rangle\langle 23\rangle[23]\langle 56\rangle\langle 1|5+6|1]\langle 4|2+3|1]}+$$

$$\frac{-1/2\langle 34\rangle\langle 46\rangle[12]^2\langle 16\rangle}{\langle 12\rangle[23][56]\langle 1|5+6|1]\langle 4|2+3|1]}+$$

$$\frac{-1/2\langle 3|1+2|4]\langle 13\rangle\langle 46\rangle^2[24]}{\langle 12\rangle[56]\langle 1|2+3|4]\langle 4|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{-41/12[45][14]\langle 13\rangle[25][12]}{\langle 12\rangle[23][56]\langle 1|2+3|4]\langle 4|5+6|4]}+$$

$$\frac{\langle 46\rangle[14]\langle 34\rangle^2(43/9\langle 23\rangle\langle 46\rangle-1/2\langle 24\rangle\langle 36\rangle)}{\langle 12\rangle\langle 23\rangle\langle 24\rangle\langle 56\rangle\langle 4|2+3|1]\langle 4|2+3|4]}+$$

$$\frac{77/18[14]\langle 34\rangle^2\langle 46\rangle^2}{\langle 12\rangle\langle 24\rangle\langle 56\rangle\langle 4|2+3|1]\langle 4|5+6|4]}+$$

$$\frac{1/2\langle 34\rangle\langle 46\rangle^2[12]}{\langle 24\rangle\langle 56\rangle\langle 4|1+2|3]\langle 4|5+6|4]}$$