

$$\begin{aligned}
& \frac{m_t(\langle 2|3|1+2|4|1\rangle - \langle 2|4|1+2|3|1\rangle)\text{tr}(1+2|3+4\rangle)(-3/16m_t^2\langle 14\rangle\langle 2|3|2\rangle^3|31\rangle \dots \langle 76 \text{ terms} \rangle \dots + 3/16\langle 2|4|2\rangle|32\rangle\langle 1|3|4|2\rangle|1|3|4|2\rangle\langle 24\rangle)}{(12|12|\Delta_{12|3|4|5}^2)} + \\
& \frac{m_t(-7/6\text{tr}(3|4\rangle\langle 2|4|2\rangle\langle 24\rangle|32\rangle \dots \langle 5 \text{ terms} \rangle \dots + 7/3\langle 14\rangle|3|4|2\rangle\langle 2|4|2\rangle|12\rangle)}{\langle 1|3|1+2|4|2\rangle} + \\
& \frac{m_t(7/6m_t^2\langle 32\rangle\langle 2|4|2\rangle\langle 24\rangle - 7/6\text{tr}(3|4\rangle\langle 32\rangle\langle 2|4|2\rangle\langle 24\rangle + 7/6m_t^2\langle 32\rangle\langle 24\rangle\langle 2|3|2\rangle - 7/6\langle 1|3|4\rangle\langle 31\rangle|1|3|4|1\rangle)}{\langle 1|3|1+2|4|2\rangle} + \\
& \frac{|32|m_t(-7/3|2|3|4|2\rangle|1|3|4\rangle\langle 12\rangle^2 \dots \langle 4 \text{ terms} \rangle \dots - 7/3\langle 24\rangle|2|3|4|2\rangle\langle 1|3|1\rangle\langle 12\rangle)}{\langle 1|3|1+2|4|2\rangle\langle 1|5|2\rangle} + \\
& \frac{m_t(-2/3\langle 2|3|2\rangle^2\langle 24\rangle|32\rangle \dots \langle 8 \text{ terms} \rangle \dots - 1/3\langle 14\rangle|1|3|4|1\rangle|3|4|1\rangle)}{\langle 1|4|1+2|3|2\rangle} + \\
& \frac{\langle 32\rangle m_t(-1/3\langle 1|3|2\rangle|14\rangle\langle 2|3|2\rangle \dots \langle 4 \text{ terms} \rangle \dots - 1/3|2|3|4|2\rangle\langle 2|3|4\rangle)}{\langle 1|4|1+2|3|2\rangle} + \\
& \frac{\langle 2|3|2\rangle|32|m_t(-2/3\langle 14\rangle\langle 2|3|2\rangle^2 \dots \langle 3 \text{ terms} \rangle \dots + 2/3|2|3|4\rangle\langle 2|4|2\rangle\langle 12\rangle)}{\langle 1|4|1+2|3|2\rangle\langle 1|5|2\rangle} + \\
& \frac{m_t(2/3\langle 2|4|1\rangle|3|4|2\rangle|1|3|4\rangle \dots \langle 5 \text{ terms} \rangle \dots - 1/3\langle 2|3|4|2\rangle|1|3|4\rangle|31\rangle)}{\langle 2|3|1+2|4|1\rangle} + \\
& \frac{m_t(2/3\langle 2|3|1\rangle|3|4|1\rangle\langle 2|3|4\rangle - 1/3\langle 32\rangle|1|3|4|1\rangle\langle 2|3|4\rangle + 1/3\text{tr}(3|4\rangle\langle 2|4|1\rangle\langle 32\rangle|14\rangle)}{\langle 2|3|1+2|4|1\rangle} + \\
& \frac{m_t(7/3\langle 2|4|1\rangle|3|4|2\rangle|1|3|4\rangle \dots \langle 3 \text{ terms} \rangle \dots + 7/3\langle 2|3|4|2\rangle\langle 24\rangle|31\rangle|12\rangle)}{\langle 2|4|1+2|3|1\rangle} + \\
& \frac{m_t(7/3\langle 2|3|1\rangle|3|4|1\rangle\langle 2|3|4\rangle \dots \langle 4 \text{ terms} \rangle \dots + 7/6\text{tr}(3|4\rangle\langle 2|4|1\rangle\langle 32\rangle|14\rangle)}{\langle 2|4|1+2|3|1\rangle} + \\
& \frac{m_t(-13/12\langle 2|3|2\rangle^2m_t^2\langle 1|3|1\rangle|31\rangle\langle 14\rangle \dots \langle 36 \text{ terms} \rangle \dots - 1/6|1|3|4|1\rangle\langle 1|3|4|1\rangle\langle 1|3|1\rangle|31\rangle\langle 14\rangle)}{\langle 1|5|2|\Delta_{12|3|4|5}} + \\
& \frac{-7/12m_t^3\langle 32\rangle\langle 2|4|2\rangle^3\langle 24\rangle}{\langle 1|5|2|\Delta_{12|3|4|5}} + \\
& \frac{m_t(5/3\langle 3|4|2\rangle\langle 2|3|4\rangle\langle 12\rangle^2|1|3|4|1\rangle \dots \langle 121 \text{ terms} \rangle \dots + 3/8\langle 24\rangle\text{tr}(3|4\rangle|32\rangle\langle 2|3|4|2\rangle\langle 2|4|2\rangle)}{\langle 12\rangle\Delta_{12|3|4|5}} + \\
& \frac{m_t(-3/8\langle 1|3|4\rangle\langle 2|4|1\rangle^2\langle 12\rangle\langle 3|4|2\rangle \dots \langle 23 \text{ terms} \rangle \dots - 3/4\langle 2|3|2\rangle\langle 1|3|1\rangle\langle 2|3|4|2\rangle\langle 31\rangle|14\rangle)}{\langle 12\rangle\Delta_{12|3|4|5}} + \\
& (12345 \rightarrow \overline{21435})
\end{aligned}$$