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\frac{(1/3\langle 12\rangle\langle 32\rangle[12]\langle 24\rangle+1/3\langle 34\rangle\langle 12\rangle\langle 2|3|1]+2/3m_t^2\langle 32\rangle\langle 24\rangle)}{\langle 12\rangle(s_{123}-m_t^2)}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \frac{2/3m_t^2\langle 34\rangle\langle 2|3|1]}{\langle 12\rangle[12](s_{122}-m_t^2)} +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \frac{m_t^2\langle 2|3|1](s_{123}-m_t^2)\langle 1/8\langle 24\rangle\langle 3|4|2]\ldots\langle\!\langle 3\,\text{terms}\rangle\!\rangle\ldots-1/8\langle 2|4|2]\langle 34\rangle\rangle}{\Delta_{12|3|45}^2} +
\frac{((2|3|1+2|4|1]-(2|4|1+2|3|1))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2)(1/48m_t^2[24](32)-1/48\langle3|4|1]\langle1|3|4]-1/48\langle2|3|4](3|4|2]+1/48m_t^2\langle31\rangle[14])}{(12)[12]\Delta_{12|3|4|5}^2} + \frac{((2|3|1+2|4|1)-(2|4|1+2|3|1))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2)(1/48m_t^2[24](32)-1/48\langle3|4|1]\langle1|3|4]-1/48\langle2|3|4](3|4|2]+1/48m_t^2\langle31\rangle[14])}{(12)[12](2|3|1+2|4|1)} + \frac{((2|3|1+2|4|1)-(2|4|1+2|3|1))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2)(1/48m_t^2[24](32)-1/48\langle3|4|1](1|3|4]-1/48\langle2|3|4](3|4|2]+1/48m_t^2\langle31\rangle[14])}{(12)[12](2|3|4)} + \frac{((2|3|1+2|4|1)-(2|4|1+2|3|1))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2)(1/48m_t^2[24](32)-1/48\langle3|4|1](1|3|4]-1/48\langle2|3|4](3|4|2]+1/48m_t^2\langle31\rangle[14])}{(12)[12](2|3|4)} + \frac{((2|3|1+2|4|1)-(2|4|1+2|3|1))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2)(1/48m_t^2[24](32)-1/48\langle3|4|1](1|3|4]-1/48\langle2|3|4](3|4|2]+1/48m_t^2\langle31\rangle[14])}{(12)[12](2|3|4|3)} + \frac{((2|3|1+2|3|4))m_t(\operatorname{tr}(3|4)\operatorname{tr}(1+2|3)-2m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))(s_{123}-m_t^2\operatorname{tr}(1+2|4))
                                                                                                                                                                                                                                                                                                                                                                                                       \frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}) - 2m_t^2\mathrm{tr}(1+2|\mathbf{4}))m_t^2(1/32\langle2|3|2]\langle\mathbf{3}|4|1]\langle24\rangle\dots\langle\langle21\,\mathrm{terms}\rangle\rangle\dots + 1/96\langle2|4|2]\langle\mathbf{3}2\rangle[12]\langle24\rangle)}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}) - 2m_t^2\mathrm{tr}(1+2|\mathbf{4}))m_t^2(1/32\langle2|3|2)\langle\mathbf{3}|4|1\rangle\langle24\rangle\dots\langle\langle21\,\mathrm{terms}\rangle\rangle\dots + 1/96\langle2|4|2]\langle\mathbf{3}2\rangle[12]\langle24\rangle)}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}) - 2m_t^2\mathrm{tr}(1+2|\mathbf{4}))m_t^2(1/32\langle2|3|2)\langle\mathbf{3}|4|1\rangle\langle24\rangle\dots\langle\langle21\,\mathrm{terms}\rangle\rangle\dots + 1/96\langle2|4|2)\langle32\rangle[12]\langle24\rangle)}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}) - 2m_t^2\mathrm{tr}(1+2|\mathbf{4}))m_t^2(1/32\langle2|3|2)\langle\mathbf{3}|4|1\rangle\langle24\rangle\dots\langle\langle21\,\mathrm{terms}\rangle\rangle\dots + 1/96\langle2|4|2)\langle32\rangle[12]\langle34|1\rangle\langle24\rangle\dots\langle\langle21\,\mathrm{terms}\rangle\rangle\dots + 1/96\langle2|4|2\rangle\langle32\rangle[12]\langle34|1\rangle\langle34\rangle\dots\langle\langle21\,\mathrm{terms}\rangle
                                                                                                                                                                                                                                                                                                                                                                                                       \frac{m_{\tilde{t}}^2(\text{tr}(1+2|\mathbf{3})\text{tr}(1+2|\mathbf{4}) - 2s_{12}\text{tr}(\mathbf{3}|\mathbf{4}))(-1/96\langle 2|\mathbf{3}|2]\langle \mathbf{3}|\mathbf{4}|1]\langle 2\mathbf{4}\rangle \dots \langle \! \langle 10\,\text{terms} \rangle\! \rangle \dots + 1/24\langle \mathbf{3}|\mathbf{4}|1]\text{tr}(\mathbf{3}|\mathbf{4})\langle 2\mathbf{4}\rangle)}{\Delta_{12|\mathbf{3}|\mathbf{4}5}\Delta_{12|\mathbf{3}|\mathbf{4}5}\Delta_{12|\mathbf{3}|\mathbf{4}|5}}
                                                                                                                                                                                                                                                                                                                                                                                                                \frac{\langle \mathbf{32} \rangle (\text{tr}(\mathbf{3}|\mathbf{4}) \text{tr}(1+2|\mathbf{3}) - 2m_{\tilde{t}}^2 \text{tr}(1+2|\mathbf{4})) m_{\tilde{t}}(1/32[24]\langle 1|3|1]\langle 2|4|1] \dots \langle\!\langle 3 \text{ terms} \rangle\!\rangle \dots + 1/48[12]\langle 1|3|4|2\rangle[14])}{\Delta_{12}[\mathbf{3}|\mathbf{4}|\mathbf{5}\Delta_{12}]\mathbf{3}|\mathbf{4}|\mathbf{5}} + \frac{1}{2} \frac{1}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|45}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4][1|3|4|2])}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|3)\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4))(1/96\text{tr}(3|4)\langle 1|3|1][14] - 1/96\langle 2|3|4|1][14]}{\Delta_{12|3|4|5}\Delta_{12|3|4|5}} + \frac{\langle 32 \rangle m_t(\text{tr}(1+2|4) - 2s_{12}\text{tr}(3|4) - 2
                                                                                                                                                                               \frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}) - 2m_{\tilde{t}}^2\mathrm{tr}(1+2|\mathbf{4}))m_{\tilde{t}}^2(s_{123} - m_{\tilde{t}}^2)(-1/32\langle31\rangle\langle24\rangle\langle2|\mathbf{4}|1] + 1/48\langle2|3|\mathbf{4}|2\rangle\langle3\mathbf{4}\rangle - 1/32\langle2|\mathbf{4}|2]\langle32\rangle\langle2\mathbf{4}\rangle + 1/48m_{\tilde{t}}^2\langle32\rangle\langle2\mathbf{4}\rangle)}{\langle12\rangle\Delta_{12|3|\mathbf{4}5}\Delta_{12|3|\mathbf{4}5}\Delta_{12|3|\mathbf{4}5}\Delta_{12|3|\mathbf{4}5}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \frac{1/48\langle 2|3|4|[3|4|2\rangle(\mathrm{tr}(3|4)\mathrm{tr}(1+2|3)-2m_{\tilde{t}}^2\mathrm{tr}(1+2|4))m_{\tilde{t}}^2(s_{123}-m_{\tilde{t}}^2)}{\langle 12\rangle\Delta_{12}|3|45}+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{t}}^2)+\frac{1}{2}(s_{123}-m_{\tilde{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \frac{m_t(-1/24\langle \mathbf{3}|\mathbf{4}|2]\langle 2|\mathbf{3}|\mathbf{4}]\langle 12\rangle\langle 2|\mathbf{3}|1]\ldots\langle (47\,\mathrm{terms})\rangle\ldots+1/12[2\mathbf{4}]\langle \mathbf{3}2\rangle\langle 1|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{4}|1])}{\langle 12\rangle\Delta_{12|\mathbf{2}|\mathbf{4}|\mathbf{5}}}+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \frac{m_t(-5/24\text{tr}(\mathbf{3}|\mathbf{4})\langle 2\mathbf{4}\rangle\langle 2|\mathbf{3}|1][\mathbf{3}|\mathbf{4}|1\rangle\dots\langle 11\,\text{terms}\rangle)\dots+1/8\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\text{tr}(\mathbf{3}|\mathbf{4})\langle 1\mathbf{4}\rangle[\mathbf{3}|1])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \frac{(-1/24\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle \mathbf{3}2\rangle[2|\mathbf{3}|\mathbf{4}\rangle\dots\langle 13\,\mathrm{terms})\!)\dots+1/24\langle \mathbf{3}\mathbf{4}\rangle\langle 12\rangle\langle 2|\mathbf{3}|2]\langle 2|\mathbf{3}|1]\mathrm{tr}(\mathbf{3}|\mathbf{4}))}{\langle 12\rangle\Delta_{12}|\mathbf{3}|\mathbf{4}|\mathbf{5}} + \frac{(-1/24\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|2\rangle\langle 2|2\rangle\langle 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \frac{\langle 2|\mathbf{3}|\mathbf{4}|2\rangle[\mathbf{34}](1/12m_t^2\mathrm{tr}(\mathbf{3}|\mathbf{4})-1/6m_t^4-1/24\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 1|\mathbf{3}|1]-1/24\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|2]\rangle}{\langle 12\rangle\Delta_{12}|\mathbf{3}|\mathbf{4}|\mathbf{5}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \frac{m_t(-1/3m_t^2\langle \mathbf{3} \mathbf{1} \rangle \langle 2|\mathbf{3}|\mathbf{4}][\mathbf{1}|\mathbf{3}|\mathbf{4}|\mathbf{1}] \dots \langle (12\,\mathrm{terms}) \dots + 1/6m_t^2\langle 2|\mathbf{3}|\mathbf{4}]\langle \mathbf{1}|\mathbf{4}|\mathbf{1}]\langle \mathbf{3}|\mathbf{4}|\mathbf{1}])}{\langle 12 \rangle [12]\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (12345 \rightarrow \overline{21345})
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