$$g_3 \to$$

$$g_3 + \frac{1}{16\,\pi^2}\left(\frac{1}{2}\,{g_3}^3 - {g_3}^3\,\mathrm{LF}_{3,-1}[m_3] - \frac{1}{4}\sum_p {g_3}^3\,\mathrm{LF}_{2,0}\left[m_d^{\,p}\right] + \frac{1}{6}\sum_p {g_3}^3\,\mathrm{LF}_{3,-1}\left[m_d^{\,p}\right] - \frac{1}{2}\sum_p {g_3}^3\,\mathrm{LF}_{2,0}\left[m_q^{\,p}\right] + \frac{1}{3}\sum_p {g_3}^3\,\mathrm{LF}_{3,-1}\left[m_q^{\,p}\right] - \frac{1}{4}\sum_p {g_3}^3\,\mathrm{LF}_{2,0}\left[m_u^{\,p}\right] + \frac{1}{6}\sum_p {g_3}^3\,\mathrm{LF}_{3,-1}\left[m_u^{\,p}\right]\right)$$