

Divergent Triangle Integral 5: $I_3^{4-2\epsilon}(0, m^2, m^2; 0, 0, m^2)$

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Expression valid in the region $m^2 > 0$

$$I_3^{\{D=4-2\epsilon\}}(0, m^2, m^2; 0, 0, m^2) = \left(\frac{\mu^2}{m^2}\right)^\epsilon \frac{1}{m^2} \left(-\frac{1}{2\epsilon} + 1\right) + \mathcal{O}(\epsilon) \quad (1)$$

For ϵ see the file on [notation](#).

We also present this function with the singularities regulated with a small mass λ ,

$$I_3^{\{D=4\}}(0, m^2, m^2; \lambda^2, \lambda^2, m^2) = -\frac{1}{2m^2} \ln\left(\frac{\lambda^2}{m^2}\right) + \mathcal{O}(\lambda^2)$$

[Return to general page on triangles](#)