

Euler-Mascheroni constant

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1 Definition

Both the *harmonic series* H_n and *natural logarithm* $\ln(n)$ diverge as $n \rightarrow \infty$. However, they are both slowly diverging functions and γ is the difference between them as $n \rightarrow \infty$.

$$\gamma = \lim_{n \rightarrow \infty} H_n - \ln(n) = \sum_{k=1}^{\infty} \left(\frac{1}{k} - \ln\left(\frac{k+1}{k}\right) \right)$$