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A new generalization of Euler's constant

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ABSTRACT.

A new generalization of Euler's constant, $c = \lim_{n\to\infty}\left(1+\frac{1}{2}+\cdots+\frac{1}{n}-\ln n\right)$, this time as a function $\gamma(a,b)$ of two positive real variables, $a \in (0,\infty)$, $b \in \left[0, \frac{1}{2a}\right]$, is given such that, in particular, we have $c = \gamma(1,0)$.

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