Hello latex!

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introduction

Let's begin with a formula $e^{i\pi} + 1 = 0$.
But we can also do

$$e = \lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n = \lim_{n \to \infty} \frac{n}{\sqrt{n!}}$$

We can do another:

$$e = \sum_{n=0}^{\infty} \frac{1}{n!}$$

We can also use continued fractions

$$e = 2 + \cfrac{1}{1 + \cfrac{1}{2 + \cfrac{1}{3 + \cfrac{2}{4 + \cfrac{3}{5 + \cfrac{4}{\ddots}}}}}}$$

1 More formulas

$$\int_a^b f(x)dx$$

$$\iiiint f(x, y, z)dxdydz$$

$$\iint f(x)dxdy$$

$$\vec{v} = <v_1, v_2, v_3>$$

$$\vec{v} = \vec{v_1} + \vec{v_2} + \vec{v_3}$$

$$\vec{v} \cdot \vec{w}$$

$$\vec{a} \times \vec{b}$$

$$\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$