

$$\begin{aligned}
 e &= \exp(1) = \sum_{k=0}^{\infty} \frac{1}{k!} \\
 &= \lim_{n \rightarrow \infty} \left(1 + \frac{1}{n} \right)^n \\
 &\approx 2.7182818284590452\dots
 \end{aligned}$$