
$x \rightarrow 0$

$$\operatorname{sen} x \cong x$$

$$\tan x \cong x$$

$$\operatorname{arcsen} x \cong x$$

$$\operatorname{arctan} x \cong x$$

$$1 - \cos x \cong \frac{x^2}{2}$$

$$a^x - 1 \cong x \ln a$$

$$\ln(1+x) \cong x$$

$$(1+ax)^{1/x} \cong e^a$$

$$(1+x)^k - 1 \cong kx$$

$x \rightarrow \infty$

$$\operatorname{sen} \frac{1}{x} \cong \frac{1}{x}$$

$$\tan \frac{1}{x} \cong \frac{1}{x}$$

$$\operatorname{arcsen} \frac{1}{x} \cong \frac{1}{x}$$

$$\operatorname{arctan} \frac{1}{x} \cong \frac{1}{x}$$

$$1 - \cos \frac{1}{x} \cong \frac{1}{2x^2}$$

$$a^{1/x} - 1 \cong \frac{\ln a}{x}$$

$$\ln\left(1 + \frac{1}{x}\right) \cong \frac{1}{x}$$

$$\left(1 + \frac{a}{x}\right)^x \cong e^a$$

$$\left(1 + \frac{1}{x}\right)^k - 1 \cong \frac{k}{x}$$
