



# Propiedades

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▼ Status	
⋮ Type	

Racionales

$$\lim_{x \rightarrow +\infty} \frac{x^n}{x^m} = 0 \quad \text{si } m > n$$

Trigonometricos

$$\lim_{x \rightarrow 0} \frac{\sin(x)}{x} = 1$$

$$\lim_{x \rightarrow 0} \frac{1 - \cos(x)}{x} = 0$$

$$\lim_{x \rightarrow 0} \frac{1 - \cos(x)}{x^2} = \frac{1}{2}$$

Logaritmicos

$$\lim_{x \rightarrow 0^+} \ln(x) = -\infty$$

$$\lim_{x \rightarrow \infty} \ln(x) = \infty$$

$$\lim_{x \rightarrow \infty} \frac{\ln(x)}{x} = 0$$

$$\lim_{x \rightarrow 0} \frac{\ln(x+1)}{x} = 1$$

$$\lim_{x \rightarrow 0} \frac{\ln(x)}{x-1} = 1$$

## Exponenciales

$$\lim_{x \rightarrow 0} x e^{-x} = 0$$

$$\lim_{x \rightarrow \infty} x e^{-x} = 0$$

$$\lim_{x \rightarrow \infty} a^{1/x} = 1 \quad (a > 0)$$

$$\lim_{x \rightarrow \infty} x^{1/x} = 1$$

## Crecimiento de las funciones

Ordenar  $e^x$   $\ln(x)$   $x^n$   $a^x$   $\sin(x)$   $\cos(x)$