

TABLA DE DERIVADAS

SUMA Y RESTA	$y = f(x) + g(x)$	$y' = f'(x) + g'(x)$
PRODUCTO POR UN NÚMERO	$y = k \cdot f(x)$	$y' = k \cdot f'(x)$
PRODUCTO	$y = f(x) \cdot g(x)$	$y' = f'(x) \cdot g(x) + f(x) \cdot g'(x)$
COCIENTE	$y = \frac{f(x)}{g(x)}$	$y' = \frac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{(g(x))^2}$
REGLA DE LA CADENA	$y = f[g(x)]$	$y' = f'[g(x)] \cdot g'(x)$
POTENCIAS	$y = x^n$	$y' = n \cdot x^{n-1}$
	$y = k$	$y' = 0$
	$y = x$	$y' = 1$
	$y = [f(x)]^n$	$y' = n \cdot [f(x)]^{n-1} \cdot f'(x)$
	$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$
	$y = \sqrt{f(x)}$	$y' = \frac{1}{2\sqrt{f(x)}} \cdot f'(x)$
EXPONENCIALES	$y = e^x$	$y' = e^x$
	$y = a^x$	$y' = a^x \cdot \ln a$
	$y = e^{f(x)}$	$y' = e^{f(x)} \cdot f'(x)$
	$y = a^{f(x)}$	$y' = a^{f(x)} \cdot \ln a \cdot f'(x)$
LOGARÍTMICAS	$y = \ln x$	$y' = \frac{1}{x}$
	$y = \log_a x$	$y' = \frac{1}{x} \cdot \frac{1}{\ln a}$
	$y = \ln f(x)$	$y' = \frac{1}{f(x)} \cdot f'(x)$
	$y = \log_a f(x)$	$y' = \frac{1}{x} \cdot \frac{1}{\ln a} \cdot f'(x)$
TRIGONOMÉTRICAS	$y = \text{sen } x$	$y' = \text{cos } x$
	$y = \text{cos } x$	$y' = -\text{sen } x$
	$y = \text{tg } x$	$y' = 1 + \text{tg}^2 x$ $y' = \text{sec}^2 x$ $y' = \frac{1}{\cos^2 x}$
	$y = \text{cotg } x$	$y' = -1 - \text{cotg}^2 x$ $y' = -\text{cosec}^2 x$ $y' = \frac{-1}{\text{sen}^2 x}$
	$y = \text{arcsen } x$	$y' = \frac{1}{\sqrt{1-x^2}}$
	$y = \text{arccos } x$	$y' = \frac{-1}{\sqrt{1-x^2}}$
	$y = \text{arctg } x$	$y' = \frac{1}{1+x^2}$
	$y = \text{sen } f(x)$	$y' = \text{cos } f(x) \cdot f'(x)$
	$y = \text{cos } f(x)$	$y' = -\text{sen } f(x) \cdot f'(x)$
	$y = \text{tg } f(x)$	$y' = [1 + \text{tg}^2 f(x)] \cdot f'(x)$ $y' = \text{sec}^2 f(x) \cdot f'(x)$ $y' = \frac{1}{\cos^2 f(x)} \cdot f'(x)$
	$y = \text{tg } f(x)$	$y' = [-1 - \text{cotg}^2 f(x)] \cdot f'(x)$ $y' = -\text{cosec}^2 f(x) \cdot f'(x)$ $y' = \frac{-1}{\text{sen}^2 f(x)} \cdot f'(x)$
	$y = \text{arcsen } f(x)$	$y' = \frac{1}{\sqrt{1-(f(x))^2}} \cdot f'(x)$
	$y = \text{arccos } f(x)$	$y' = \frac{-1}{\sqrt{1-(f(x))^2}} \cdot f'(x)$
	$y = \text{arctg } f(x)$	$y' = \frac{1}{1+(f(x))^2} \cdot f'(x)$