

Tabla de Derivadas

Función	Derivada	Función	Derivada
$y = k$	$y' = 0$	—	—
$y = x$	$y' = 1$	—	—
$y = x^2$	$y' = 2x$	$y = f(x)^2$	$y' = 2f(x)f'(x)$
$y = x^n$	$y' = nx^{n-1}$	$y = f(x)^n$	$y' = nf(x)^{n-1}f'(x)$
$y = \frac{1}{x}$	$y' = -\frac{1}{x^2}$	$y = \frac{1}{f(x)}$	$y' = -\frac{f'(x)}{f(x)^2}$
$y = \frac{1}{x^n}$	$y' = \frac{-n}{x^{n+1}}$	$y = \frac{1}{f(x)^n}$	$y' = -\frac{nf'(x)}{f(x)^{n+1}}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$	$y = \sqrt{f(x)}$	$y' = \frac{f'(x)}{2\sqrt{f(x)}}$
$y = \sqrt[3]{x}$	$y' = \frac{1}{3\sqrt[3]{x^2}}$	$y = \sqrt[3]{f(x)}$	$y' = \frac{f'(x)}{3\sqrt[3]{f(x)^2}}$
$y = \sqrt[n]{x}$	$y' = \frac{1}{n\sqrt[n]{x^{n-1}}}$	$y = \sqrt[n]{f(x)}$	$y' = \frac{f'(x)}{n\sqrt[n]{f(x)^{n-1}}}$
$y = a^x$	$y' = a^x \ln a$	$y = a^{f(x)}$	$y' = a^{f(x)} \ln a f'(x)$
$y = e^x$	$y' = e^x$	$y = e^{f(x)}$	$y' = e^{f(x)} f'(x)$
$y = \log_a x$	$y' = \frac{1}{x \ln a}$	$y = \log_a f(x)$	$y' = \frac{f'(x)}{f(x) \ln a}$
$y = \ln x$	$y' = \frac{1}{x}$	$y = \ln f(x)$	$y' = \frac{f'(x)}{f(x)}$
$y = \sen x$	$y' = \cos x$	$y = \sen f(x)$	$y' = f'(x) \cos f(x)$
$y = \cos x$	$y' = -\sen x$	$y = \cos f(x)$	$y' = -f'(x) \sen f(x)$
$y = \tg x$	$y' = 1 + \tg^2 x = \frac{1}{\cos^2 x}$	$y = \tg f(x)$	$y' = (1 + \tg^2 f(x))f'(x) = \frac{f'(x)}{\cos^2 f(x)}$
$y = \cotg x$	$y' = -1 - \cotg^2 x = \frac{-1}{\sen^2 x}$	$y = \cotg f(x)$	$y' = (-1 - \cotg^2 f(x))f'(x) = \frac{-f'(x)}{\sen^2 f(x)}$
$y = \arcsen x$	$y' = \frac{1}{\sqrt{1-x^2}}$	$y = \arcsen f(x)$	$y' = \frac{f'(x)}{\sqrt{1-f(x)^2}}$
$y = \arccos x$	$y' = \frac{-1}{\sqrt{1-x^2}}$	$y = \arccos f(x)$	$y' = \frac{-f'(x)}{\sqrt{1-f(x)^2}}$
$y = \arctg x$	$y' = \frac{1}{1+x^2}$	$y = \arctg f(x)$	$y' = \frac{f'(x)}{1+f(x)^2}$