

REGLAS DE DERIVACIÓN

FUNCIÓN	FUNCIÓN DERIVADA
$y = k$	$y' = 0$
$y = n.x$	$y' = n$
$y = x^n$	$y' = n.x^{n-1}$
$y = \sqrt{x}$	$y' = \frac{1}{2.\sqrt{x}}$
$y = \ln x$	$y' = \frac{1}{x}$
$y = \operatorname{sen} x$	$y' = \cos x$
$y = \cos x$	$y' = -\operatorname{sen} x$
$y = \operatorname{tg} x$	$y' = \sec^2 x$
$y = \cot gx$	$y' = -\operatorname{cosec} x$
$y = \sec x$	$y' = \operatorname{tg} x . \sec x$
$y = \operatorname{cosec} x$	$y' = -\cot gx . \operatorname{cosec} x$
$y = e^x$	$y' = e^x$
$y = e^{f(x)}$	$y' = e^{f(x)} . f'(x)$
$y = a^x$	$y' = a^x . \ln a$
$y = a^{f(x)}$	$y' = a^{f(x)} . \ln a . f'(x)$
$y = [f(x)]^{g(x)}$	$y' = [f(x)]^{g(x)} \cdot \left[g'(x) . \ln f(x) + \frac{g(x)}{f(x)} . f'(x) \right]$
$y = u.v$	$y' = u'.v + u.v'$
$y = \frac{u}{v}$	$y' = \frac{u'.v - u.v'}{v^2}$
$y = f(x)^k$	$y' = k . f'(x)^{k-1}$
$y = k.f(x)$	$y' = k.f'(x)$