## DERIVADAS

## REGLAS DE DERIVACIÓN

Suma	(f+g)'(x) = f'(x) + g'(x)
Resta	(f-g)'(x) = f'(x) - g'(x)
Producto	(fg)'(x) = f'(x)g(x) + f(x)g'(x)
Cociente	$\left(\frac{f}{g}\right)'(x) = \frac{f'(x)g(x) - f(x)g'(x)}{(g(x))^2}$
Regla de la cadena	(f(g(x)))'(x) = f'(g(x))g'(x)
Derivada de la función inversa	$(f^{-1})'(x) = \frac{1}{f'(f^{-1}(x))}$

## TABLA DE DERIVADAS

f(x) = c, c  constante	f'(x) = 0
$f(x) = x^n, n \text{ entero}$	$f'(x) = nx^{n-1}$
$f(x) = e^x$	$f'(x) = e^x$
$f(x) = \ln(x), x > 0$	$f'(x) = \frac{1}{x}$
$f(x) = \sin(x)$	$f'(x) = \cos(x)$
$f(x) = \cos(x)$	$f'(x) = -\sin(x)$
$f(x) = \arcsin(x)$	$f'(x) = \frac{1}{\sqrt{1 - x^2}}$
$f(x) = \arccos(x)$	$f'(x) = -\frac{1}{\sqrt{1-x^2}}$
$f(x) = \arctan(x)$	$f'(x) = \frac{1}{1+x^2}$