



CUADRO DE FUNCIONES DERIVADAS

FUNCIÓN	DERIVADA
Constante	
$y = k$	$y' = 0$
Identidad	
$y = x$	$y' = 1$
Potenciales	
$y = x^n$	$y' = nx^{n-1}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$
$y = \sqrt[n]{x}$	$y' = \frac{1}{n\sqrt[n]{x^{n-1}}}$
Exponenciales	
$y = e^x$	$y' = e^x$
$y = a^x$	$y' = a^x \ln a$
Logarítmicas	
$y = \ln x$	$y' = \frac{1}{x}$
$y = \log_a x$	$y' = \frac{1}{x} \log_a e$
Trigonométricas	
$y = \operatorname{sen} x$	$y' = \cos x$
$y = \cos x$	$y' = -\operatorname{sen} x$
$y = \operatorname{tg} x$	$y' = \frac{1}{\cos^2 x} = 1 + \operatorname{tg}^2 x$

CUADRO DE INTEGRALES INMEDIATAS

$\int x^n dx = \frac{x^{n+1}}{n+1} + C \text{ si } n \neq -1$	$\int \frac{dx}{x} = \int x^{-1} dx = \text{Ln} x + C$
$\int a^x dx = \frac{a^x}{\text{Lna}} + C$	$\int \text{sen} x dx = -\text{cos} x + C$
$\int \frac{dx}{\text{cos}^2 x} = \text{tag} x + C$	$\int (1 + \text{tag}^2 x) dx = \text{tag} x + C$
$\int (1 + \text{ctag}^2 x) dx = -\text{ctag} x + C$	$\int \frac{dx}{\sqrt{a^2 - x^2}} = \text{arcsen} \frac{x}{a} + C$
$\int \frac{dx}{\text{sen}^2 x} = -\text{ctag} x + C$	$\int e^x dx = e^x + C$
$\int \frac{dx}{a^2 + x^2} = \frac{1}{a} \text{arctag} \frac{x}{a} + C$	$\int \text{cos} x dx = \text{sen} x + C$