

DERIVATE

Derivate fondamentali

$\alpha \in \mathbb{R} ; a > 0 \wedge a \neq 1$

$f(x)$	$f'(x)$
c	0
x^α	$\alpha \cdot x^{\alpha-1}$
\sqrt{x}	$\frac{1}{2\sqrt{x}}$
a^x	$a^x \cdot \ln a$
e^x	e^x
$\log_a x$	$\frac{1}{x} \cdot \log_a e$
$\ln x$	$\frac{1}{x}$
$\text{sen } x$	$\cos x$
$\cos x$	$-\text{sen } x$
$\text{tg } x$	$\frac{1}{\cos^2 x}$
$\arcsen x$	$\frac{1}{\sqrt{1-x^2}}$
$\arccos x$	$-\frac{1}{\sqrt{1-x^2}}$
$\text{arctg } x$	$\frac{1}{1+x^2}$

Algebra delle derivate

y	y'
$f(x) + g(x)$	$f'(x) + g'(x)$
$f(x) \cdot g(x)$	$f'(x) \cdot g(x) + f(x) \cdot g'(x)$
$c \cdot f(x)$	$c \cdot f'(x)$
$\frac{f(x)}{g(x)}$	$\frac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{[g(x)]^2}$
$\frac{1}{g(x)}$	$-\frac{g'(x)}{[g(x)]^2}$
$f(g(x))$	$f'(z) \cdot g'(x) \mid_{z=g(x)}$