

DERIVATE FONDAMENTALI

FUNZIONE	DERIVATA
$y = c$	$y' = 0$
$y = x$	$y' = 1$
$y = x^n$	$y' = n \cdot x^{n-1}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$
$y = \sqrt[n]{x}$	$y' = \frac{1}{n \cdot \sqrt[n]{x^{n-1}}}$
$y = a^x$	$y' = a^x \cdot \ln a$
$y = e^x$	$y' = e^x$
$y = \log_a x$	$y' = \frac{1}{x} \cdot \log_a e = \frac{1}{x \cdot \log a}$
$y = \log x$	$y' = \frac{1}{x}$
$y = \operatorname{sen} x$	$y' = \cos x$
$y = \cos x$	$y' = -\operatorname{sen} x$
$y = \operatorname{tg} x$	$y' = \frac{1}{\cos^2 x} = 1 + \operatorname{tg}^2 x$
$y = \operatorname{cotg} x$	$y' = -\frac{1}{\operatorname{sen}^2 x} = -(1 + \operatorname{cotg}^2 x)$
$y = \operatorname{arc} \operatorname{sen} x$	$y' = \frac{1}{\sqrt{1-x^2}}$
$y = \operatorname{arc} \cos x$	$y' = -\frac{1}{\sqrt{1-x^2}}$
$y = \operatorname{arc} \operatorname{tg} x$	$y' = \frac{1}{1+x^2}$
$y = \operatorname{arc} \operatorname{cotg} x$	$y' = -\frac{1}{1+x^2}$