

Tabella delle derivate

Funzione	Derivata	Funzione	Derivata
$y = k$	$y' = 0$	$y = [f(x)]^n$	$y' = n[f(x)]^{n-1} f'(x)$
$y = x$	$y' = 1$	$y = \sqrt[n]{f(x)}$	$y' = \frac{f'(x)}{n\sqrt[n]{f(x)^{n-1}}}$
$y = x^n$	$y' = nx^{n-1}$	$y = \sqrt[n]{[f(x)]^m}$	$y' = \frac{mf'(x)}{n\sqrt[n]{[f(x)]^{n-m}}}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$	$y = \operatorname{sen} f(x)$	$y' = \cos f(x) \cdot f'(x)$
$y = \sqrt[n]{x^m}$	$y' = \frac{m}{n\sqrt[n]{x^{n-m}}}$	$y = \cos f(x)$	$y' = -\operatorname{sen} f(x) \cdot f'(x)$
$y = \operatorname{sen} x$	$y' = \cos x$	$y = \operatorname{tg} f(x)$	$y' = \frac{1}{\cos^2 f(x)} f'(x)$
$y = \cos x$	$y' = -\operatorname{sen} x$	$y = \operatorname{ctg} f(x)$	$y' = -\frac{1}{\operatorname{sen}^2 f(x)} f'(x)$
$y = \operatorname{tg} x$	$y' = \frac{1}{\cos^2 x} = 1 + \operatorname{tg}^2 x$	$y = \operatorname{arcsen} f(x)$	$y' = \frac{1}{\sqrt{1-[f(x)]^2}} f'(x)$
$y = \operatorname{ctg} x$	$y' = -\frac{1}{\operatorname{sen}^2 x} = -(1 + \operatorname{ctg}^2 x)$	$y = \arccos f(x)$	$y' = -\frac{1}{\sqrt{1-[f(x)]^2}} f'(x)$
$y = \operatorname{arcsen} x$	$y' = \frac{1}{\sqrt{1-x^2}}$	$y = \operatorname{arctg} f(x)$	$y' = \frac{1}{1+[f(x)]^2} f'(x)$
$y = \arccos x$	$y' = -\frac{1}{\sqrt{1-x^2}}$	$y = \operatorname{arcctg} f(x)$	$y' = -\frac{1}{1+[f(x)]^2} f'(x)$
$y = \operatorname{arctg} x$	$y' = \frac{1}{1+x^2}$	$y = \log_a f(x)$	$y' = \frac{1}{f(x)} \log_a e f'(x)$
$y = \operatorname{arcctg} x$	$y' = -\frac{1}{1+x^2}$	$y = \ln f(x)$	$y' = \frac{1}{f(x)} f'(x)$
$y = \log_a x$	$y' = \frac{1}{x} \log_a e$	$y = a^{f(x)}$	$y' = a^{f(x)} \ln a f'(x)$
$y = \ln x$	$y' = \frac{1}{x}$	$y = e^{f(x)}$	$y' = e^{f(x)} f'(x)$
$y = a^x$	$y' = a^x \ln a$	$y = x^x$	$y' = x^x (1 + \ln x)$
$y = e^x$	$y' = e^x$	$y = [f(x)]^{g(x)}$	$y' = [f(x)]^{g(x)} \cdot \left\{ g'(x) \ln f(x) + \frac{g(x)}{f(x)} f'(x) \right\}$