

Tabella delle derivate e delle primitive fondamentali

$F(x) = \int f(x) dx$	$f(x) = F'(x)$	
x^n	nx^{n-1}	$n \in \mathbf{N}$
$\log_e x $	$\frac{1}{x}$	$x \in (-\infty, 0)$ oppure $x \in (0, +\infty)$
$\sqrt[m]{x^n}$	$\frac{n}{m \sqrt[m]{x^{m-n}}}$	$n, m \in \mathbf{N}_+$ e $m \geq 2$, $x < 0$ o $x > 0$
$\frac{1}{\sqrt[m]{x^n}}$	$\frac{-n}{m \sqrt[m]{x^{m+n}}}$	$n, m \in \mathbf{N}_+$ e $m \geq 2$, $x < 0$ o $x > 0$
x^α	$\alpha x^{\alpha-1}$	$\alpha \in \mathbf{R}$, $x > 0$
e^x	e^x	
a^x	$a^x \log_e a$	$a > 0$
$\log_a x $	$\frac{1}{x \log_e a} = \frac{1}{x} \log_a e$	$a > 0$, $a \neq 1$, $x > 0$ oppure $x < 0$
$\sin x$	$\cos x$	
$\cos x$	$-\sin x$	
$\text{tang } x$	$1 + \text{tang}^2 x = \frac{1}{\cos^2 x}$	
$\text{cotang } x$	$-1 - \text{cotang}^2 x = \frac{-1}{\sin^2 x}$	
$\arcsin x$	$\frac{1}{\sqrt{1-x^2}}$	
$\arccos x$	$\frac{-1}{\sqrt{1-x^2}}$	
$\arctan x$	$\frac{1}{1+x^2}$	
$\text{arccotan } x$	$\frac{-1}{1+x^2}$	
$\sinh x$	$\cosh x$	
$\cosh x$	$\sinh x$	
$\tanh x$	$1 - \tanh^2 x = \frac{1}{\cosh^2 x}$	
$\text{cotanh } x$	$1 - \text{cotanh}^2 x = \frac{-1}{\sinh^2 x}$	
$\text{settsinh } x$	$\frac{1}{\sqrt{1+x^2}}$	
$\text{settcosh } x$	$\frac{1}{\sqrt{x^2-1}}$	$x > 1$
$\text{setttanh } x$	$\frac{1}{1-x^2}$	$-1 < x < 1$
$\text{settcotanh } x$	$\frac{1}{1-x^2}$	$(x < -1)$ oppure $(x > 1)$
$\frac{1}{2} \log \left \frac{1+x}{1-x} \right $	$\frac{1}{1-x^2}$	$(x < -1)$ o $(-1 < x < 1)$ o $(x > 1)$