

### Algumas fórmulas de derivação

função de $x$	$\frac{d}{dx}$
$mu(x)$ , $m \in \mathbb{R}$	$mu'(x)$
$u(x)^n$ , $n \in \mathbb{R}$	$nu(x)^{n-1}u'(x)$
$\log_a  u(x) $ , $a \in \mathbb{R}^+ \setminus \{1\}$	$\frac{u'(x)}{u(x) \ln a}$
$a^{u(x)}$ , $a \in \mathbb{R}^+$	$a^{u(x)}u'(x) \ln a$
$\sin u(x)$	$\cos u(x) u'(x)$
$\cos u(x)$	$-\sin u(x) u'(x)$
$\tan u(x)$	$\sec^2 u(x) u'(x)$
$\cotan u(x)$	$-\csc^2 u(x) u'(x)$
$\sec u(x)$	$\tan u(x) \sec u(x) u'(x)$
$\csc u(x)$	$-\cotan u(x) \csc u(x) u'(x)$
$\sinh u(x)$	$\cosh u(x) u'(x)$
$\cosh u(x)$	$\sinh u(x) u'(x)$
$\arcsin u(x)$	$\frac{u'(x)}{\sqrt{1-u(x)^2}}$
$\arccos u(x)$	$-\frac{u'(x)}{\sqrt{1-u(x)^2}}$
$\arctan u(x)$	$\frac{u'(x)}{1+u(x)^2}$
$\operatorname{arccot} u(x)$	$-\frac{u'(x)}{1+u(x)^2}$

### Algumas fórmulas trigonométricas

$\sec u = \frac{1}{\cos u}$	$\csc u = \frac{1}{\sin u}$
$\cot u = \frac{\cos u}{\sin u}$	
$\cos^2 u = \frac{1+\cos(2u)}{2}$	$\sin^2 u = \frac{1-\cos(2u)}{2}$
$1 + \tan^2 u = \sec^2 u$	$1 + \cotan^2 u = \csc^2 u$
$\cos^2(\arcsin u) = 1 - u^2$	$\sin^2(\arccos u) = 1 - u^2$

### Algumas fórmulas hiperbólicas

$\sinh u = \frac{e^u - e^{-u}}{2}$	$\cosh u = \frac{e^u + e^{-u}}{2}$
$\cosh^2 u - \sinh^2 u = 1$	