$\frac{dy}{dx}$ Tabla de derivadas

GET IT ON Google Play

Reglas de derivación			
$y = K$	$y' = 0$	$y = f(x) \cdot g(x)$	$y' = f'(x) \cdot g(x) + f(x) \cdot g'(x)$
$y = f(x) + g(x)$	$y' = f(x) + g(x)$	$y = \frac{f(x)}{g(x)}$	$y' = \frac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{[g(x)]^2}$
$y = K \cdot f(x)$	$y' = K \cdot f'(x)$	$y = f \circ g(x) = f(u)$	$y' = \frac{dy}{dx} = \frac{dy}{du} \cdot \frac{du}{dx}$

Fórmulas de derivación			
Función simple		**Función compuesta**	
$y = x$	$y' = 1$		
$y = x^n$	$y' = n \cdot x^{n-1}$	$y = u^n$	$y' = n \cdot u^{n-1} \cdot u'$
$y = \frac{1}{x}$	$y' = -\frac{1}{x^2}$	$y = \frac{1}{u}$	$y' = -\frac{u'}{u^2}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$	$y = \sqrt{u}$	$y' = \frac{u'}{2\sqrt{u}}$
$y = \sqrt[n]{x}$	$y' = \frac{1}{n \cdot \sqrt[n]{x^{n-1}}}$	$y = \sqrt[n]{u}$	$y' = \frac{u'}{n \cdot \sqrt[n]{u^{n-1}}}$
$y = e^x$	$y' = e^x$	$y = e^u$	$y' = u' \cdot e^u$
$y = a^x$	$y' = a^x \cdot \ln a$	$y = a^u$	$y' = u' \cdot a^u \cdot \ln a$
$y = x^x$	$y' = x^x (1 + \ln x)$	$y = u^v$	$y' = u^v \cdot v' \cdot \ln u + u^{v-1} \cdot v \cdot u'$
$y = \ln x$	$y' = \frac{1}{x}$	$y = \ln u$	$y' = \frac{u'}{u}$
$y = \log_a x$	$y' = \frac{1}{x \cdot \ln a}$	$y = \log_a u$	$y' = \frac{u'}{u \cdot \ln a}$
$y = \operatorname{sen} x$	$y' = \cos x$	$y = \operatorname{sen} u$	$y' = u' \cdot \cos u$
$y = \cos x$	$y' = -\operatorname{sen} x$	$y = \cos u$	$y' = -u' \cdot \operatorname{sen} u$
$y = \operatorname{tg} x$	$y' = \frac{1}{\cos^2 x}$	$y = \operatorname{tg} u$	$y' = \frac{u'}{\cos^2 u}$
$y = arc\operatorname{sen} x$	$y' = \frac{1}{\sqrt{1-x^2}}$	$y = arc\operatorname{sen} u$	$y' = \frac{u'}{\sqrt{1-u^2}}$
$y = arc\cos x$	$y' = \frac{-1}{\sqrt{1-x^2}}$	$y = arc\cos u$	$y' = \frac{-u'}{\sqrt{1-u^2}}$
$y = arc\operatorname{tg} x$	$y' = \frac{1}{1+x^2}$	$y = arc\operatorname{tg} f(x)$	$y' = \frac{u'}{1+u^2}$