Para aprender a derivar visita el blog del profesor10demates

Derivadas

http://profesor10demates.blogspot.com.es/p/derivadas.html

Función	Función derivada	Función	Función derivada
$y = k$	$y' = 0$	$y = \ln x$	$y' = \frac{1}{x}$
$y = x$	$y' = 1$		
$y = u + v + w$	$y' = u' + v' + w'$	$y = \ln u$	$y' = \frac{u'}{u}$
$\begin{cases} y = g(u) \\ u = h(x) \end{cases}$	$y' = y'_u \cdot u'$	$y = \log_a u$	$y' = \frac{u'}{u \ln a}$
$\begin{cases} y = f(x) \\ x = f^{-1}(y) \end{cases}$	$y'(x) = \frac{1}{x'(y)}$	$y = ku$	$y' = ku'$
		$y = uv$	$y' = u'v + uv'$
$y = x^n$	$y' = nx^{n-1}$	$y = uvw$	$y' = u'vw +$
$y = u^n$	$y' = nu^{n-1}u'$		$+ uv'w + uvw'$
$y = ku$	$y' = ku'$	$y = \frac{u}{k}$	$y' = \frac{u'}{k}$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$	$y = \frac{u}{v}$	$y' = \frac{vu' - uv'}{v^2}$
$y = \sqrt{u}$	$y' = \frac{u'}{2\sqrt{u}}$	$y = e^x$	$y' = e^x$
		$y = e^u$	$y' = e^4 \cdot u'$
$y = \sqrt[n]{u}$	$y' = \frac{u'}{n\sqrt[n]{u^{n-1}}}$	$y = a^u$	$y' = a^u u' \ln a$
		$y = u^v$	$y' = vu^{v-1}u' +$
$y = \operatorname{sen} x$	$y' = \cos x$		$+ u^v \cdot v' \ln u$
$y = \operatorname{sen} a$	$y' = (\cos u)u'$	$y = \cos x$	$y' = -\operatorname{sen} x$
		$y = \cos u$	$y' = -(\cos u)u'$
$y = \operatorname{tg} x$	$y' = \begin{cases} \frac{1}{\cos^2 x} \\ 1 + \operatorname{tg}^2 x \\ \sec^2 x \end{cases}$	$y = \operatorname{cotg} x$	$y' = \begin{cases} -\frac{1}{\operatorname{sen}^2 x} \\ -(1+\cos^2 x) \\ -\operatorname{cos} c^2 x \end{cases}$

Función	Función derivada	Función	Función derivada
$y = \sec x$	$y' = \operatorname{tg} x \sec x$	$y = \operatorname{cosec} x$	$y' = -\operatorname{cotg} x \cdot$ $\cdot \operatorname{cosec} x$
$y = \operatorname{arcsen} x$	$y' = \frac{1}{\sqrt{1 - x^2}}$	$y = \arccos x$	$y' = \frac{1}{\sqrt{1 - x^2}}$
$y = \operatorname{arctg}$	$y' = \frac{1}{1 + x^2}$	$y = \operatorname{arccot} x$	$y' = \frac{1}{1 + x^2}$
$y = \operatorname{arcsec} x$	$y' = \frac{1}{x\sqrt{x^2 - 1}}$	$y = \operatorname{arccosec} x$	$y' = -\frac{1}{x\sqrt{x^2 - 1}}$