

Derivadas de funciones elementales

y	y'	y	y'
k	0		
x	1		
x ⁿ	nx ⁿ⁻¹	u ⁿ	nu ⁿ⁻¹ u'
a ^x	a ^x lna	a ^u	a ^u ·lna·u'
e ^x	e ^x	e ^u	e ^u ·u'
u ^v	v·u ^{v-1} ·u'+u ^v ·lnu·v'		
√x	$\frac{1}{2\sqrt{x}}$	√u	$\frac{u'}{2\sqrt{u}}$
ⁿ √x	$\frac{1}{n\sqrt[n]{x^{n-1}}}$	ⁿ √u	$\frac{u'}{n\sqrt[n]{u^{n-1}}}$
log _a x	$\frac{1}{x} \log_a e$	log _a u	$\frac{u'}{u} \log_a e$
lnx	$\frac{1}{x}$	lnu	$\frac{u'}{u}$
senx	cosx	senu	cosu·u'
cosx	-senx	cosu	-senu·u'
tgx	$\frac{1}{\cos^2 x}$	tg u	$\frac{u'}{\cos^2 u}$
cotgx	$\frac{-1}{\sen^2 x}$	cotgu	$\frac{-u'}{\sen^2 u}$
secx	$\frac{\sen x}{\cos^2 x}$	secu	$\frac{\sen u}{\cos^2 u} u'$
cosecx	$\frac{-\cos x}{\sen^2 x}$	cosecu	$\frac{-\cos u}{\sen^2 u} u'$
arc senx	$\frac{1}{\sqrt{1-x^2}}$	arc senu	$\frac{u'}{\sqrt{1-u^2}}$
arc cosx	$\frac{-1}{\sqrt{1-x^2}}$	arc cosu	$\frac{-u'}{\sqrt{1-u^2}}$
arc tgx	$\frac{1}{1+x^2}$	arc tgu	$\frac{u'}{1+u^2}$
arc cotgx	$\frac{-1}{1+x^2}$	arc cotgu	$\frac{-u'}{1+u^2}$
arc secx	$\frac{1}{x\sqrt{x^2-1}}$	arc secu	$\frac{u'}{u\sqrt{u^2-1}}$
arc cosecx	$\frac{-1}{x\sqrt{x^2-1}}$	arc cosecu	$\frac{-u'}{u\sqrt{u^2-1}}$