Funció derivada i operacions

$y = f(x) + g(x)$	$y' = f'(x) + g'(x)$
$y = f(x) - g(x)$	$y' = f'(x) - g'(x)$
$y = f(x) \cdot g(x)$	$y' = f'(x) \cdot g(x) + f(x) \cdot g'(x)$
$y = \dfrac{f(x)}{g(x)}$	$y' = \dfrac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{(g(x))^2}$

Derivada de les funcions elementals

$f(x) = a \quad a \in$ ¡	$f'(x) = 0$
$f(x) = ax \quad a \in$ ¡	$f(x)' = a$
$f(x) = x^n$	$f(x)' = n \cdot x^{n-1}$
$f(x) = \sqrt{x}$	$f'(x) = \dfrac{1}{2\sqrt{x}}$
$f(x) = e^x$	$f'(x) = e^x$
$f(x) = \ln x$	$f'(x) = \dfrac{1}{x}$
$f(x) = a^x$	$f'(x) = a^x \cdot \ln a$
$f(x) = \log_a x$	$f'(x) = \dfrac{1}{\ln a} \cdot \dfrac{1}{x}$

Derivada de funcions compostes: Regla de la cadena

	$f(x) = u(v(x))$	$f'(x) = u'(v(x)) \cdot v'(x)$
A	$f(x) = a \cdot u(x) \quad a \in$ ¡	$f'(x) = a \cdot u'(x)$
B	$f(x) = (u(x))^n$	$f'(x) = n \cdot (u(x))^{n-1} \cdot u'(x)$
C	$f(x) = \sqrt{u(x)}$	$f'(x) = \dfrac{1}{2\sqrt{u(x)}} \cdot u'(x)$
D	$f(x) = e^{u(x)}$	$f'(x) = e^{u(x)} \cdot u'(x)$
E	$f(x) = \ln u(x)$	$f'(x) = \dfrac{1}{u(x)} \cdot u'(x)$
F	$f(x) = a^{u(x)}$	$f'(x) = a^{u(x)} \cdot \ln a \cdot u'(x)$
G	$f(x) = \log_a u(x)$	$f'(x) = \dfrac{1}{\ln a} \cdot \dfrac{1}{u(x)} \cdot u'(x)$