

Table of Derivatives

This leaflet provides a table of the most common functions and their derivatives.

$y = f(x)$		$\frac{dy}{dx} = f'(x)$
k	k is any constant	0
x		1
x^2		$2x$
x^3		$3x^2$
x^n	for any constant n	nx^{n-1}
e^x		e^x
e^{kx}		ke^{kx}
$\ln(x) = \log_e(x)$		$\frac{1}{x}$
$\sin(x)$		$\cos(x)$
$\sin(kx)$		$k \cos(kx)$
$\cos(x)$		$-\sin(x)$
$\cos(kx)$		$-k \sin(kx)$
$\tan(x) = \frac{\sin(x)}{\cos(x)}$		$\sec^2(x)$
$\tan(kx)$		$k \sec^2(kx)$