Tabella Derivate

Funzioni elementari	Funzioni composte	Esempi
$D[x] = 1$	$D[kx] = k$	$D[2] = 0$; $D[3x] = 3$; $\mathrm{D[ex] = e}$
$D[x^n] = nx^{n-1}$	$D[f(x)]^n = n[f(x)]^{n-1}f'(x)$	$D[x^2] = 2x$; $D[3x+2]^5 = 15[3x+2]^4$; $D[\ln^2(x)] = \frac{2\ln(x)}{x}$
$D[\sqrt{x}] = \frac{1}{2\sqrt{x}}$	$D[\sqrt{f(x)}] = \frac{f'(x)}{2\sqrt{f(x)}}$	$D[\sqrt{\sin(x)}] = \frac{\cos(x)}{2\sqrt{\sin(x)}}$
$D[e^x] = e^x$	$D[e^{f(x)}] = f'(x)e^{f(x)}$	$D[e^{-x}] = -e^{-x}$; $D[e^{x^2}] = 2xe^{x^2}$; $D[e^{\sin(x)}] = \cos(x)e^{\sin(x)}$
$D[a^x] = a^x \ln(a)$	$D[a^{f(x)}] = f'(x)a^{f(x)}\ln(a)$	$D[2^x] = 2^x\ln(2)$; $D[3^{x^7}] = 7x^6 3^{x^7}\ln(3)$
$D[\ln(x)] = \frac{1}{x}$	$D[\ln[f(x)]] = \frac{f'(x)}{f(x)}$	$D[\ln(e^x+1)] = \frac{e^x}{e^x+1}$; $D[\ln(x^2-1)] = \frac{2x}{x^2-1}$
$D[sin(x)] = \cos(x)$	$D[\sin[f(x)]] = f'(x)\cos[f(x)]$	$D[\sin(2x)] = 2\cos(2x)$
$D[\cos(x)] = -\sin(x)$	$D[\cos[f(x)]] = -f'(x)\sin[f(x)]$	$D[\sin(2x)] = -\cos(2x)$
$D[\arctan(x)] = \frac{1}{1+x^2}$	$D[\arctan[f(x)]] = \frac{f'(x)}{1+[f(x)]^2}$	$D[\arctan(e^x)] = \frac{e^x}{1+[e^x]^2}$
$D[\tan(x)] = \frac{1}{\cos^2(x)}$	$D[\tan[f(x)]] = \frac{f'(x)}{\cos^2[f(x)]}$	$D[\tan[\ln(x)]] = \frac{1}{x\cos^2[\ln(x)]}$
$D[\tan(x)] = [1+\tan^2(x)]$	$D[\tan[f(x)]] = f'(x)[1+\tan^2[f(x)]]$	$D[\tan(x^3)] = 3x^2[1+\tan^2(x^3)]$
$D[\cot(x)] = -\frac{1}{\sin^2(x)}$	$D[\cot[f(x)]] = -\frac{f'(x)}{\sin^2[f(x)]}$	$D[\cot(5x)] = -\frac{5}{\sin^2[5x]}$
$D[\arcsin(x)] = \frac{1}{\sqrt{1-x^2}}$	$D[\arcsin[f(x)]] = \frac{f'(x)}{\sqrt{1-[f(x)]^2}}$	$D[\arcsin(3x^5)] = \frac{15x^4}{\sqrt{1-[3x^5]^2}}$
$D[\arccos(x)] = -\frac{1}{\sqrt{1-x^2}}$	$D[\arccos[f(x)]] = -\frac{f'(x)}{\sqrt{1-[f(x)]^2}}$	$D[\arccos(e^{3x})] = -\frac{3e^{3x}}{\sqrt{1-[e^{3x}]^2}}$

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