Tarea 4. Derivadas con fórmula. Regla de la Cadena

$$d\left(f\left(g(x)\right)\right) = f'\left(g(x)\right)\cdot g'(x)$$

$\frac{d}{dx}\left(\sin\left(3^x\right)\right)$

$\frac{d}{dx}\left(3^{\cos(x)}\right)$

$\frac{d}{dx}\left(\arcsin(\sec(x))\right)$

$\frac{d}{dx}\left(\arctan\left(\sqrt{x}\right)\right)$

$\frac{d}{dx}\left(\ln(\arccos(x))\right)$

$\frac{d}{dx}\left(\sin(\ln(x))\right)$

$\frac{d}{dx}\left((\arctan(x))^{10}\right)$

$\frac{d}{dx}\left(3^{\sin(\ln(x))}\right)$

$\frac{d}{dx}\left(e^{5\cos(4x^2+1)^2}\right)$

$\frac{d}{dx}\left(2^{\sec(x+x^2)}\right)$

Resultados

$\frac{\cos(\ln(x))}{x}$ $\quad -\frac{1}{\sqrt{1-x^2}\,\arccos(x)}$ $\quad \cos\left(3^x\right)\,3^x\ln(3)$ $\quad -3^{\cos(x)}\sin(x)\ln(3)$

$\frac{1}{2\sqrt{x}\,(1+x)}$ $\quad \frac{3^{\sin(\ln(x))}\cos(\ln(x))\ln(3)}{x}$ $\quad \frac{10\arctan(x)^9}{1+x^2}$ $\quad \frac{\sec(x)\tan(x)}{\sqrt{1-\sec(x)^2}}$

$-80\cos\left(4x^2+1\right)\sin\left(4x^2+1\right)x\,e^{5\cos\left(4x^2+1\right)^2}$ $\quad 2^{\sec(x+x^2)}\sec\left(x+x^2\right)\tan\left(x+x^2\right)(1+2x)\ln(2)$