ADEFACIL

EJERCICIOS DERIVADAS (2)

○ $f(x) = e^{x^2}$ $\longrightarrow$ $f'(x) = 2x \cdot e^{x^2}$

○ $f(x) = x \cdot e^x$ $\longrightarrow$ $f'(x) = e^x + x \cdot e^x = e^x(1+x)$

○ $f(x) = e^{x^2-2x}$ $\longrightarrow$ $f'(x) = (2x-2)\, e^{x^2-2x}$

○ $f(x) = x^4 \cdot e^{3x}$ $\longrightarrow$ $f'(x) = 4x^3 \cdot e^{3x} + 3x^4 \cdot e^{3x}$

○ $f(x) = \ln(x^2+1)$ $\longrightarrow$ $f'(x) = \dfrac{2x}{x^2+1}$

○ $f(x) = x^5 \ln x$ $\longrightarrow$ $f'(x) = x^4(5\ln x + 1)$

○ $f(x) = \dfrac{\ln x}{x}$ $\longrightarrow$ $f'(x) = \dfrac{1 - \ln x}{x^2}$

○ $f(x) = \ln(x-5)$ $\longrightarrow$ $f'(x) = \dfrac{1}{x-5}$

○ $f(x) = \ln\sqrt{1+x^2}$ $\longrightarrow$ $f'(x) = \dfrac{x}{1+x^2}$

○ $f\left(x\right)=sen(2x)\longrightarrow f'(x)=2\cos\left(x\right)$

○ $f\left(x\right)=\cos\left(2x+1\right)\longrightarrow f'(x)=-2sen(2x+1)$

○ $f\left(x\right)=\sqrt{sen\left(3x\right)}\longrightarrow f'(x)=\dfrac{3\cos\left(3x\right)}{2\sqrt{sen\left(3x\right)}}$

○ $f\left(x\right)=x\cdot cosx\longrightarrow f'(x)=\cos\left(x\right)-x\cdot sen\left(x\right)$

○ $f\left(x\right)=\ln\left(sen\left(x\right)\right)\longrightarrow f'(x)=\dfrac{\cos\left(x\right)}{sen\left(x\right)}=ctg\left(x\right)$