Tabel derivate

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1 Derivatele funcţiilor trigonometrice

$(x^\alpha)' = \alpha \cdot x^{\alpha-1}$

$(a^x)' = a^x \cdot \ln a \qquad \left[(e^x)' = e^x\right]$

$(\sin x)' = \cos x$

$(\cos x)' = -\sin x$

$(\ln x)' = \frac{1}{x}$

$(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$

$(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$

$(\arctan x)' = \frac{1}{1+x^2}$

$(\operatorname{arccot} x)' = -\frac{1}{1+x^2}$

$(\tan x)' = \tan^2 x + 1 = \frac{1}{\cos^2 x}$

$(\cot x)' = -\frac{1}{\sin x}$

2 Reguli de derivare

$(f+g)' = f' + g'$

$(f \cdot g)' = f' \cdot g + f \cdot g' \qquad \left[(\alpha \cdot f(x))' = \alpha \cdot f(x)'\right]$

$\left(\frac{f}{g}\right)' = \frac{f' \cdot g - f \cdot g'}{g^2}$

$(f \circ g)'(x) = f'(g(x)) \cdot g'(x)$

$(f^{-1})'(f(x)) = \frac{1}{f'(x)}$

$(f^{-1} \circ f)'(f(x)) = \frac{1}{f'(x)}$ deoarece este funcţie inversă

$(f^{-1})'(f(x)) \cdot f'(x) = \frac{1}{f'(x)}$