VZORCE DERIVACE

$(k)' = 0$

$(x^n)' = n.x^{n-1}$

$(\sqrt{x})' = \dfrac{1}{2\sqrt{x}}$

$(e^x)' = e^x$

$(a^x)' = a^x.lna$

$(lnx)' = \dfrac{1}{x}$

$(\log_a x)' = \dfrac{1}{x.lna}$

$(sinx)' = cosx$

$(cosx)' = -sinx$

$(tgx)' = \dfrac{1}{cos^2 x}$

$(cotgx)' = -\dfrac{1}{sin^2 x}$

$(arcsinx)' = \dfrac{1}{\sqrt{1-x^2}}$

$(arccosx)' = -\dfrac{1}{\sqrt{1-x^2}}$

$(arctgx)' = \dfrac{1}{1+x^2}$

$(arccotgx)' = -\dfrac{1}{1+x^2}$

Derivace součtu / rozdílu $(f \pm g)' = f' \pm g'$

Derivace součinu $(f * g)' = f' * g + f * g'$

Derivace podílu $\left(\dfrac{f}{g}\right)' = \dfrac{f'.g - f.g'}{g^2}$