

PRAVIDLA PRO DERIVACE (ÚSPORNÁ):

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

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

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

$$(x^\alpha)' = \alpha \cdot x^{\alpha-1}, \alpha \in \mathbf{R}$$

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

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

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

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