

# POCHODNE FUNKCJI ELEMENTARNYCH

$$(c)' = 0$$

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

$$\left(\frac{1}{x}\right)' = -\frac{1}{x^2}$$

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

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

$$(a^x)' = a^x \cdot \ln a$$

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

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

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

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

$$(\operatorname{tg} x)' = \frac{1}{\cos^2 x}$$

$$(\operatorname{ctg} x)' = -\frac{1}{\sin^2 x}$$

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

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

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

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