## derivacni vzorecky

- $(\alpha^x)' = \alpha^x \ln \alpha, \, \alpha > 0$
- $(x^{\alpha})' = \alpha x^{\alpha 1}$
- $\bullet \ (e^x)' = e^x$
- $(\ln x)' = \frac{1}{x}$
- $(\log_{\alpha} x)' = \frac{1}{x \ln \alpha}$
- $(\sin x)' = \cos x$
- $\bullet \ (\cos x)' = -\sin x$
- $(\tan x)' = \frac{1}{\cos^2 x}$
- $(\cot x)' = -\frac{1}{\sin^2 x}$
- $(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$
- $(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$
- $(\arctan x)' = \frac{1}{1+x^2}$
- $(\operatorname{arccotan} x)' = -\frac{1}{1+x^2}$
- $(\alpha f \pm \beta g)' = \alpha f' \pm \beta g'$
- $\bullet \ (fg)' = f'g + fg'$
- $(\frac{f}{g})' = \frac{f'g fg'}{g^2}$