

# Ableitungstabelle

- $(x^a)' = ax^{a-1}$
- $(e^x)' = e^x$
- $(a^x)' = a^x \ln a \quad (a > 0)$
- $(\sin x)' = \cos x$
- $(\cos x)' = -\sin x$
- $(\tan x)' = \frac{1}{\cos^2 x}$
- $(\cot x)' = -\frac{1}{\sin^2 x}$
- $(\cosh x)' = \sinh x$
- $(\sinh x)' = \cosh x$
- $(\tanh x)' = \frac{1}{\cosh^2 x}$
- $(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$
- $(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$
- $(\arctan x)' = \frac{1}{1+x^2}$
- $(\ln x)' = \frac{1}{x}$
- $(\ln(x + \sqrt{x^2 + 1}))' = \frac{1}{\sqrt{x^2 + 1}}$
- $(\ln(x + \sqrt{x^2 - 1}))' = \frac{1}{\sqrt{x^2 - 1}}$