

Wzory na obliczenie pochodnych:

- $(x^n)' = n \cdot x^{n-1}$
- $\left(\frac{1}{x^n}\right)' = -\frac{n}{x^{n+1}}$
- $(\sqrt[n]{x})' = \frac{1}{n \cdot \sqrt[n]{x^{n-1}}}$
- $\left(\frac{1}{\sqrt[n]{x}}\right)' = -\frac{1}{n \cdot \sqrt[n]{x^{n+1}}}$
- $(\sin x)' = \cos x$
- $(\cos x)' = -\sin x$
- $(\operatorname{tg} x)' = \frac{1}{\cos^2 x}$
- $(\operatorname{ctg} x)' = -\frac{1}{\sin^2 x}$
- $(a^x)' = a^x \cdot \ln a$
- $(e^x)' = e^x$
- $(\log_a x)' = \frac{1}{x \cdot \ln a}$
- $(\ln x)' = \frac{1}{x}$
- $(x^x)' = x^x \cdot (\ln x + 1)$
- $\left(\ln \sqrt{\frac{1+x}{1-x}}\right)' = \frac{1}{1-x^2}$

Reguły obliczania pochodnych:

- $(f + g)'(x_0) = f'(x_0) + g'(x_0)$
- $(f - g)'(x_0) = f'(x_0) - g'(x_0)$
- $(f \cdot g)'(x_0) = f'(x_0) \cdot g(x_0) + f(x_0) \cdot g'(x_0)$
- $(c \cdot f)'(x_0) = c \cdot f'(x_0)$
- $\left(\frac{f}{g}\right)'(x_0) = \frac{f'(x_0) \cdot g(x_0) - f(x_0) \cdot g'(x_0)}{(g(x_0))^2}$, dla $g(x_0) \neq 0$
- $(f \circ g)'(x_0) = f'(g(x_0)) \cdot g'(x_0)$, albo $\frac{dy}{dx} = \frac{dy}{du} \cdot \frac{du}{dx}$