Tablica derivacija

$f(x)$	$f'(x)$	$f(x)$	$f'(x)$
C	0	ctg	$-\frac{1}{\sin^2 x}$
x^α	$\alpha x^{\alpha-1}$	$\arcsin x$	$\frac{1}{\sqrt{1-x^2}}$
e^x	e^x	$\arccos x$	$-\frac{1}{\sqrt{1-x^2}}$
a^x	$a^x \ln a$	$\operatorname{arctg} x$	$\frac{1}{1+x^2}$
$\ln x$	$\frac{1}{x}$	$\operatorname{arcctg} x$	$-\frac{1}{1+x^2}$
$\log_a x$	$\frac{1}{x \ln a}$	$\operatorname{sh} x$	$\operatorname{ch} x$
$\sin x$	$\cos x$	$\operatorname{ch} x$	$\operatorname{sh} x$
$\cos x$	$-\sin x$	$\operatorname{th} x$	$\frac{1}{\operatorname{ch}^2 x}$
$\operatorname{tg} x$	$\frac{1}{\cos^2 x}$	$\operatorname{cth} x$	$-\frac{1}{\operatorname{sh}^2 x}$

Tablica integrala

$f(x)$	$\int f(x)dx$	$f(x)$	$\int f(x)dx$
1	$x + C$	$\cos x$	$\sin x + C$
x^α	$\frac{x^{\alpha+1}}{\alpha+1} + C, \alpha \neq -1$	$\frac{1}{\sin^2 x}$	$-\operatorname{ctg} x + C$
e^x	$e^x + C$	$\frac{1}{\cos^2 x}$	$\operatorname{tg} x + C$
a^x	$\frac{a^x}{\ln a} + C$	$\frac{1}{1+x^2}$	$\operatorname{arctg} x + C$
$\frac{1}{x}$	$\ln \lvert x \rvert + C$	$\frac{1}{\sqrt{1-x^2}}$	$\arcsin x + C$
$\sin x$	$-\cos x + C$	$\frac{1}{\sqrt{x^2 \pm 1}}$	$\ln \left\lvert x + \sqrt{x^2 \pm 1} \right\rvert + C$

Ortogonalnost trigonometrijskih funkcija: za svaki $l > 0$ vrijedi:

$$\int_{-l}^{l} \sin(\frac{n\pi x}{l}) \sin(\frac{m\pi x}{l}) dx = \begin{cases} l, \ m = n \neq 0 \text{ i } m, n \in \mathbb{Z}, \\ 0, \ m = n = 0, \\ 0, \ m \neq n \text{ i } m, n \in \mathbb{Z}, \end{cases}$$

$$\int_{-l}^{l} \cos(\frac{n\pi x}{l}) \cos(\frac{m\pi x}{l}) dx = \begin{cases} l, \ m = n \neq 0 \text{ i } m, n \in \mathbb{Z}, \\ 2l, \ m = n = 0, \\ 0, \ m \neq n \text{ i } m, n \in \mathbb{Z}, \end{cases}$$

$$\int_{-l}^{l} \cos(\frac{n\pi x}{l}) \sin(\frac{m\pi x}{l}) dx = 0, \ \forall m, n \in \mathbb{Z}.$$

Trigonometrijski identiteti

$$\sin^2 x + \cos^2 x = 1$$

$$\sin(2x) = 2 \sin x \cos x$$

$$\cos(2x) = \cos^2 x - \sin^2 x$$

$$\sin x \cos y = \frac{1}{2} \left[\sin(x - y) + \sin(x + y) \right]$$

$$\sin x \sin y = \frac{1}{2} \left[\cos(x - y) - \cos(x + y) \right]$$

$$\cos x \cos y = \frac{1}{2} \left[\cos(x - y) + \cos(x + y) \right]$$