

Adicijski teoremi	
$\sin(x \pm y)$	$= \sin x \cos y \pm \cos x \sin y$
$\cos(x \pm y)$	$= \cos x \cos y \mp \sin x \sin y$
$\operatorname{tg}(x \pm y)$	$= \frac{\operatorname{tg} x \pm \operatorname{tg} y}{1 \mp \operatorname{tg} x \operatorname{tg} y}$
$\operatorname{ctg}(x \pm y)$	$= \frac{\operatorname{ctg} x \operatorname{ctg} y \mp 1}{\operatorname{ctg} y \pm \operatorname{ctg} x}$

Funkcije višestrukih argumenata	
$\sin 2x$	$= 2 \sin x \cos x$
$\cos 2x$	$= \cos^2 x - \sin^2 x$
$\operatorname{tg} 2x$	$= \frac{2 \operatorname{tg} x}{1 - \operatorname{tg}^2 x}$
$\operatorname{ctg} 2x$	$= \frac{\operatorname{ctg}^2 x - 1}{2 \operatorname{ctg} x}$

Formule pretvorbe	
$\sin x \cos y$	$= \frac{1}{2}(\sin(x+y) + \sin(x-y))$
$\cos x \cos y$	$= \frac{1}{2}(\cos(x+y) + \cos(x-y))$
$\sin x \sin y$	$= \frac{1}{2}(\cos(x-y) - \cos(x+y))$
$\sin x + \sin y$	$= 2 \sin \frac{x+y}{2} \cos \frac{x-y}{2}$
$\sin x - \sin y$	$= 2 \cos \frac{x+y}{2} \sin \frac{x-y}{2}$
$\cos x + \cos y$	$= 2 \cos \frac{x+y}{2} \cos \frac{x-y}{2}$
$\cos x - \cos y$	$= -2 \sin \frac{x+y}{2} \sin \frac{x-y}{2}$

Funkcije polovičnih argumenata	
$\sin^2 \frac{x}{2}$	$= \frac{1 - \cos x}{2}$
$\cos^2 \frac{x}{2}$	$= \frac{1 + \cos x}{2}$

$f(x)$	$f'(x)$
$x^a$	$ax^{a-1}$
$\sin x$	$\cos x$
$\cos x$	$-\sin x$
$\operatorname{tg} x$	$\frac{1}{\cos^2 x}$
$\operatorname{ctg} x$	$-\frac{1}{\sin^2 x}$
$\arcsin x$	$\frac{1}{\sqrt{1-x^2}}$
$\arccos x$	$-\frac{1}{\sqrt{1-x^2}}$
$\operatorname{arctg} x$	$\frac{1}{1+x^2}$
$\operatorname{arctg} x$	$-\frac{1}{1+x^2}$
$e^x$	$e^x$
$a^x$	$a^x \ln a$
$\ln x$	$\frac{1}{x}$
$\log_a x$	$\frac{1}{x \ln a}$
$\operatorname{sh} x$	$\operatorname{ch} x$
$\operatorname{ch} x$	$\operatorname{sh} x$
$\operatorname{th} x$	$\frac{1}{\operatorname{ch}^2 x}$
$\operatorname{cth} x$	$-\frac{1}{\operatorname{sh}^2 x}$
$\operatorname{arsh} x$	$\frac{1}{\sqrt{1+x^2}}$
$\operatorname{arch} x$	$\frac{1}{\sqrt{x^2-1}}$
$\operatorname{arth} x$	$\frac{1}{1-x^2}$
$\operatorname{arth} x$	$\frac{1}{1-x^2}$

1) $\int \frac{dx}{x} = \ln x  + C$
2) $\int x^\alpha dx = \frac{x^{\alpha+1}}{\alpha+1} + C, \alpha \in \mathbf{R} \setminus \{-1\}$
3) $\int a^x dx = \frac{a^x}{\ln a} + C$
4) $\int e^x dx = e^x + C$
5) $\int \sin x dx = -\cos x + C$
6) $\int \cos x dx = \sin x + C$
7) $\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + C$
8) $\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + C$
9) $\int \frac{dx}{x^2+a^2} = \frac{1}{a} \operatorname{arctg}\left(\frac{x}{a}\right) + C, a > 0$
10) $\int \frac{dx}{x^2-a^2} = \frac{1}{2a} \ln \left  \frac{x-a}{x+a} \right  + C, a > 0$
11) $\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin\left(\frac{x}{a}\right) + C, a > 0$
12) $\int \frac{dx}{\sqrt{x^2+A}} = \ln x + \sqrt{x^2+A}  + C, A \neq 0$
13) $\int \operatorname{sh} x dx = \operatorname{ch} x + C$
14) $\int \operatorname{ch} x dx = \operatorname{sh} x + C$
15) $\int \frac{dx}{\operatorname{sh}^2 x} = -\operatorname{cth} x + C$
16) $\int \frac{dx}{\operatorname{ch}^2 x} = \operatorname{th} x + C$
17) $\int \frac{dx}{\sin x} = \ln \operatorname{tg} \frac{x}{2}  + C$
18) $\int \frac{dx}{\cos x} = \ln \operatorname{tg}(\frac{x}{2} + \frac{\pi}{4})  + C$