

	Integrali		Izvodi
1	$\int dx = x$	1	$x^n = n \cdot x^{n-1}$
2	$\int x^n dx = \frac{x^{n+1}}{n+1}$	2	$\ln x' = \frac{1}{x}$
3	$\int e^x dx = e^x$	3	$e^x = e^x$
4	$\int a^x dx = \frac{a^x}{\ln a}$	4	$\log_a x' = \frac{1}{x \cdot \ln a}$
5	$\int \frac{dx}{x} = \ln x$	5	$a^x = a^x \ln a$
6	$\int \sin x dx = -\cos x$	6	$\sin x' = \cos x$
7	$\int \cos x dx = \sin x$	7	$\cos x' = -\sin x$
8	$\int \operatorname{tg} x dx = -\ln \cos x $	8	$\operatorname{tg} x' = \frac{1}{\cos^2 x} = \sec^2 x$
9	$\int \operatorname{ctg} x dx = \ln \sin x $	9	$\operatorname{ctg} x' = \frac{-1}{\sin^2 x} = -\operatorname{cosec}^2 x$
10	$\int \frac{dx}{\cos^2 x} = \operatorname{tg} x$	10	$\arcsin x' = \frac{1}{\sqrt{1-x^2}}$
11	$\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x$	11	$\arccos x' = \frac{-1}{\sqrt{1-x^2}}$
12	$\int \frac{dx}{a^2 + x^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a}$	12	$\operatorname{arctg} x' = \frac{1}{1+x^2}$
13	$\int \frac{dx}{a^2 - x^2} = \frac{1}{2a} \ln \left \frac{a+x}{a-x} \right $	13	$\operatorname{arccctg} x' = \frac{-1}{1+x^2}$
14	$\int \frac{dx}{x^2 - a^2} = \frac{1}{2a} \ln \left \frac{x-a}{x+a} \right $	14	$\operatorname{sh} x' = \operatorname{ch} x$
15	$\int \frac{x dx}{a^2 \pm x^2} = \pm \frac{1}{2} \ln a^2 \pm x^2 $	15	$\operatorname{ch} x' = \operatorname{sh} x$
16	$\int \frac{dx}{\sqrt{a^2 - x^2}} = \arcsin \frac{x}{a}$	16	$\operatorname{th} x' = \frac{1}{\operatorname{ch}^2 x}$
17	$\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln x + \sqrt{x^2 \pm a^2} $	17	$\operatorname{cth} x' = \frac{-1}{\operatorname{sh}^2 x}$
18	$\int \frac{x dx}{\sqrt{a^2 \pm x^2}} = \pm \sqrt{a^2 \pm x^2}$	18	$\operatorname{arsh} x' = \left[\ln (x + \sqrt{x^2 + 1}) \right]' = \frac{1}{\sqrt{1+x^2}}$
19	$\int \sin ax dx = -\frac{1}{a} \cos ax$	19	$\operatorname{arch} x' = \left[\ln (x \pm \sqrt{x^2 - 1}) \right]' = \frac{\pm 1}{\sqrt{x^2 - 1}}$
20	$\int \cos ax dx = \frac{1}{a} \sin ax$	25	$\int x^n \cdot \sin ax dx = -\frac{x^n}{a} \cos ax + \frac{n}{a} \int x^{n-1} \cdot \cos ax dx$
21	$\int \sin^n ax dx = \frac{-\sin^{n-1} ax \cdot \cos ax}{n \cdot a} + \frac{n-1}{n} \int \sin^{n-2} ax dx$	26	$\int x^n \cdot \cos ax dx = \frac{x^n \cdot \sin ax}{a} - \frac{n}{a} \int x^{n-1} \sin ax dx$
22	$\int \cos^n ax dx = \frac{\cos^{n-1} ax \cdot \sin ax}{n \cdot a} + \frac{n-1}{n} \int \cos^{n-2} ax dx$	27	$\int \frac{dx}{\cos^n ax} = \frac{1}{a \cdot (n-1)} \cdot \frac{\sin ax}{\cos^{n-1} ax} + \frac{n-2}{n-1} \int \frac{dx}{\cos^{n-2} ax}$
23	$\int x \cdot \sin ax dx = \frac{\sin ax}{a^2} - \frac{x \cos ax}{a}$	28	$\int \frac{dx}{\cos^n ax} = \frac{1}{a \cdot (n-1)} \cdot \frac{\sin ax}{\cos^{n-1} ax} + \frac{n-2}{n-1} \int \frac{dx}{\cos^{n-2} ax}$
24	$\int x \cdot \cos ax dx = \frac{\cos ax}{a^2} + \frac{x \cdot \sin ax}{a}$	29	

Integrali trigonometrijskih funkcija			
$\int \sin x dx = -\cos x$	$\int \frac{dx}{\sin^2 x} = -\operatorname{ctgx}$	$\int \cos x dx = \sin x$	$\int \frac{dx}{\cos^2 x} = \operatorname{tgx}$
$\int \sin ax dx = -\frac{1}{a} \cos ax$		$\int \cos ax dx = \frac{1}{a} \sin ax$	
$\int \sin^n ax dx = \frac{-\sin^{n-1} ax \cdot \cos ax}{n \cdot a} + \frac{n-1}{n} \int \sin^{n-2} ax dx$		$\int \cos^n ax dx = \frac{\cos^{n-1} ax \cdot \sin ax}{n \cdot a} + \frac{n-1}{n} \int \cos^{n-2} ax dx$	
$\int x \cdot \sin ax dx = \frac{\sin ax}{a^2} - \frac{x \cos ax}{a}$		$\int x \cdot \cos ax dx = \frac{\cos ax}{a^2} + \frac{x \cdot \sin ax}{a}$	
$\int x^n \cdot \sin ax dx = -\frac{x^n}{a} \cos ax + \frac{n}{a} \int x^{n-1} \cdot \cos ax dx$		$\int x^n \cdot \cos ax dx = \frac{x^n}{a} \sin ax - \frac{n}{a} \int x^{n-1} \sin ax dx$	
$\int \frac{\sin ax}{x} dx = ax - \frac{(a \cdot x)^3}{3 \cdot 3!} + \frac{(a \cdot x)^5}{5 \cdot 5!} - \dots$		$\int \frac{dx}{\cos^n ax} = \frac{1}{a \cdot (n-1)} \cdot \frac{\sin ax}{\cos^{n-1} ax} + \frac{n-2}{n-1} \int \frac{dx}{\cos^{n-2} ax}$	
$\int \frac{\sin ax}{x^n} dx = -\frac{1}{n-1} \frac{\sin ax}{x^{n-1}} + \frac{a}{n-1} \int \frac{\cos ax}{x^{n-1}} dx$			
$\int \frac{dx}{\sin^n ax} = -\frac{1}{a \cdot (n-1)} \cdot \frac{\cos ax}{\sin^{n-1} ax} + \frac{n-2}{n-1} \int \frac{dx}{\sin^{n-2} ax}$	$\int \lg x dx = -\ln \cos x $	$\int \operatorname{ctgx} dx = \ln \sin x $	

Integrali hiperboličkih funkcija			
$\int \operatorname{sh} ax dx = \frac{1}{a} \operatorname{ch} ax$	$\int \operatorname{ch} ax dx = \frac{1}{a} \operatorname{sh} ax$	$\int x \cdot \operatorname{sh} ax dx = \frac{1}{a} \cdot x \cdot \operatorname{ch} ax - \frac{1}{a^2} \cdot \operatorname{sh} ax$	
$\int \operatorname{sh}^2 ax dx = \frac{1}{4a} \operatorname{sh} 2ax - \frac{x}{2}$	$\int \frac{dx}{\operatorname{sh}^2 x} = -\operatorname{cth} x$	$\int x \cdot \operatorname{ch} ax dx = \frac{1}{a} \cdot x \cdot \operatorname{sh} ax - \frac{1}{a^2} \cdot \operatorname{ch} ax$	
$\int \operatorname{ch}^2 ax dx = \frac{1}{4a} \operatorname{sh} 2ax + \frac{x}{2}$	$\int \frac{dx}{\operatorname{ch}^2 x} = \operatorname{th} x$	$\int \operatorname{th} ax dx = \frac{1}{a} \cdot \ln \operatorname{ch} ax $	$\int \operatorname{cth} ax dx = \frac{1}{a} \cdot \ln \operatorname{sh} ax $
$\int \frac{dx}{\operatorname{sh} x} = \frac{1}{a} \ln \left \operatorname{th} \frac{ax}{2} \right $	$\int \frac{dx}{\operatorname{ch} x} = \frac{2}{a} \operatorname{arctg} e^{ax}$		
$\int x \cdot \operatorname{sh} ax dx = \frac{1}{a} x \cdot \operatorname{ch} ax - \frac{1}{a^2} \operatorname{sh} ax$			
$\int x \cdot \operatorname{ch} ax dx = \frac{1}{a} x \cdot \operatorname{sh} ax - \frac{1}{a^2} \operatorname{ch} ax$			

Trigonometrija			
$\sin^2 x + \cos^2 x = 1$	$\operatorname{tg} x \cdot \operatorname{ctg} x = 1$	$2 \sin x \cdot \sin y = \cos(x-y) - \cos(x+y)$	
$\sin 2x = 2 \cdot \sin x \cdot \cos x$	$\cos 2x = \cos^2 x - \sin^2 x$	$2 \cos x \cdot \cos y = \cos(x+y) + \cos(x-y)$	
$1 + \cos x = 2 \cdot \cos^2 \frac{x}{2}$	$1 - \cos x = 2 \cdot \sin^2 \frac{x}{2}$	$2 \sin x \cdot \cos y = \sin(x+y) + \sin(x-y)$	
$\operatorname{tg} 2x = \frac{2 \operatorname{tg} x}{1 - \operatorname{tg}^2 x}$	$\operatorname{ctg} 2x = \frac{\operatorname{ctg}^2 x - 1}{2 \operatorname{ctg} x}$	$\sin(x \pm y) = \sin x \cdot \cos y \pm \cos x \cdot \sin y$	
$\operatorname{ch}^2 x - \operatorname{sh}^2 x = 1$		$\cos(x \pm y) = \cos x \cdot \cos y \mp \sin x \cdot \sin y$	
$\operatorname{sh} x = \frac{e^x - e^{-x}}{2}$	$\operatorname{ch} x = \frac{e^x + e^{-x}}{2}$	$\operatorname{tg}(x \pm y) = \frac{\operatorname{tg} x \pm \operatorname{tg} y}{1 \mp \operatorname{tg} x \cdot \operatorname{tg} y}$	$\operatorname{ctg}(x \pm y) = \frac{\operatorname{ctg} x \cdot \operatorname{ctg} y \mp 1}{\operatorname{ctg} x \pm \operatorname{ctg} y}$
$\operatorname{th} x = \frac{e^x - e^{-x}}{e^x + e^{-x}}$	$\operatorname{cth} x = \frac{e^x + e^{-x}}{e^x - e^{-x}}$		