Novi Sad
Fakultet tehničhih nauka
Mašinstvo

Tablica izvoda
$(const)' = 0$
$(x^\alpha)' = \alpha x^{\alpha-1}$
$(a^x)' = a^x \ln a$
$(e^x)' = e^x$
$(\ln x)' = \frac{1}{x}$
$(\sin x)' = \cos x$
$(\cos x)' = -\sin x$
$(\operatorname{tg} x)' = \frac{1}{\cos^2 x}$
$(\operatorname{ctg} x)' = -\frac{1}{\sin^2 x}$
$(\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$
$(\arccos x)' = -\frac{1}{\sqrt{1-x^2}}$
$(\operatorname{arctg} x)' = \frac{1}{1+x^2}$
$(\operatorname{arcctg} x)' = -\frac{1}{1+x^2}$

Tablica integrala
$\int 0\ dx = C$
$\int x^\alpha\ dx = \frac{x^{\alpha+1}}{\alpha+1} + C,\quad \alpha \neq -1$
$\int \frac{1}{x}\ dx = \ln\lvert x\rvert + C$
$\int e^x\ dx = e^x + C$
$\int a^x\ dx = \frac{a^x}{\ln a} + C$
$\int \sin x\ dx = -\cos x + C$
$\int \cos x\ dx = \sin x + C$
$\int \frac{1}{\cos^2 x}\ dx = \operatorname{tg} x + C$
$\int \frac{1}{\sin^2 x}\ dx = -\operatorname{ctg} x + C$
$\int \frac{dx}{x^2+a^2} = \frac{1}{a} \operatorname{arctg} \frac{x}{a} + C$
$\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin \frac{x}{a} + C$
$\int \frac{dx}{a^2-x^2} = \frac{1}{2a} \ln\lvert\frac{a+x}{a-x}\rvert + C$
$\int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln\lvert x + \sqrt{x^2 \pm a^2}\rvert + C$