Derivácie

$(k)'=0 \quad (x^n)'=nx^{n-1}$

$(\ln x)'=\frac{1}{x} \quad (\log_a x)'=\frac{1}{x\ln a}$

$(e^x)'=e^x \qquad (a^x)'=a^x \ln a$

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

$(\cos x)'=-\sin x$

$(tg\ x)'=\frac{1}{\cos^2 x} \quad (\cot g\ x)'=-\frac{1}{\sin^2 x} \quad (arctg\ x)'=\frac{1}{x^2+1}$

$(\arcsin x)'=\frac{1}{\sqrt{1-x^2}}$

$(\arccos x)'=-\frac{1}{\sqrt{1-x^2}}$

$(arc\cot g\ x)'=-\frac{1}{x^2+1}$

$(k.u)'=k.u'$

$(u\pm v)'=u'\pm v'$

$(u.v)'=u'v+uv' \quad \left(\frac{u}{v}\right)'=\frac{u'v-uv'}{v^2}$

Integrály

$\int 1\,dx = x+C \quad \int 0\,dx = C$

$\int x^n dx = \frac{x^{n+1}}{n+1}+C$

$\int \frac{1}{x}dx = \ln|x|+C$

$\int e^x dx = e^x + C$

$\int a^x dx = \frac{a^x}{\ln a}+C$

$\int \sin x dx = -\cos x + C$

$\int \cos x dx = \sin x + C$

$\int \frac{1}{\cos^2 x}dx = tgx + C$

$\int \frac{1}{\sin^2 x}dx = -\cot gx + C$

$\int \frac{1}{\sqrt{1-x^2}}dx = \begin{cases} \arcsin x + C \\ -\arccos x + C \end{cases}$

$\int \frac{1}{1+x^2}dx = \begin{cases} arctgx + C \\ -arc\cot gx + C \end{cases}$

$\int \frac{1}{a^2+x^2}dx = \frac{1}{a} arctg \frac{x}{a} + C$

$\int \frac{1}{\sqrt{a^2-x^2}}dx = \arcsin \frac{x}{a} + C$

$\int \frac{f'(x)}{f(x)}dx = \ln|f(x)| + C$