VZORCE INTEGRÁLY

$$\int k\,dx = k * x + c$$

$$\int \cos x\,dx = \sin x + c$$

$$\int x^a\,dx = \frac{x^{a+1}}{a+1} + c \;\;(kde\;a \neq -1)$$

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

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

$$\int \frac{1}{\sin^2 x}\,dx = -cotgx + c$$

$$\int e^x\,dx = e^x + c$$

$$\int \frac{1}{1+x^2}\,dx = arctgx + c$$

$$\int a^x\,dx = \frac{a^x}{lna} + c$$

$$\int \frac{1}{\sqrt{1-x^2}}\,dx = arcsinx + c$$

$$\int \sin x\,dx = -\cos x + c$$

$$\int k * f = k * \int f$$

$$\int f \pm g = \int f \pm \int g$$

Per partes

$$\int f * g' = f * g - \int f' * g$$

Substituce

$$\int f(g) * g'\,dx = \int f(y)\,dy = F(y) + c = F(g) + c$$

Další speciální vzorce

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

$$\int \frac{1}{x^2 + a}\,dx = \frac{1}{\sqrt{a}}\,arctg\,\frac{x}{\sqrt{a}} + c$$

$$\int f(ax+b)\,dx = \frac{1}{a}F(ax+b) + c$$

$$\int f(x) * f'(x)\,dx = \frac{1}{2}f^2(x) + c$$