# NEURČITÉ INTEGRÁLY

$$\int 1dx = x + C$$

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

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

$$\int e^{kx} dx = \frac{e^{kx}}{k} + C$$

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

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

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

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

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

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

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

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

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

$$\int \frac{1}{ax+b} dx = \frac{\ln|ax+b|}{a} + C$$

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

**PRAVIDLA:**

$$\int (f(x) \pm g(x))dx = \int f(x)dx \pm \int g(x)dx$$

$$\int k \cdot f(x)dx = k\int f(x)dx$$

**PRAVIDLO PER PARTES:**

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