Vzorce pro integrování

$$\int a\,dx = ax + C \qquad a \in \mathbb{R} \tag{1}$$

$$\int a \cdot f(x)\,dx = a\int f(x)\,dx \qquad a \in \mathbb{R} \tag{2}$$

$$\int f(x) \pm g(x)\,dx = \int f(x)dx \pm \int g(x)\,dx \tag{3}$$

$$\int f(ax+b)\,dx = \frac{F(ax+b)}{a} + C \qquad a, b \in \mathbb{R} \tag{4}$$

$$\int u(x) \cdot v'(x)\,dx = u(x) \cdot v(x) - \int u'(x) \cdot v(x)\,dx \tag{5}$$

$$\int x^a\,dx = \frac{x^{a+1}}{a+1} + C \qquad a \in \mathbb{R} \setminus \{-1\} \tag{6}$$

$$\int \frac{1}{x}\,dx = \ln|x| + C \tag{7}$$

$$\int \frac{f'(x)}{f(x)}\,dx = \ln|f(x)| + C \tag{8}$$

$$\int \sin x\,dx = -\cos x + C \tag{9}$$

$$\int \cos x\,dx = \sin x + C \tag{10}$$

$$\int \frac{1}{\cos^2 x}\,dx = \operatorname{tg} x + C \tag{11}$$

$$\int \frac{1}{\sin^2 x}\,dx = -\operatorname{cotg} x + C \tag{12}$$

$$\int e^x\,dx = e^x + C \tag{13}$$

$$\int a^x\,dx = \frac{a^x}{\ln a} + C \qquad a > 0 \tag{14}$$

$$\int \frac{1}{\sqrt{1-x^2}}\,dx = \arcsin x + C \tag{15}$$

$$\int \frac{1}{\sqrt{1-x^2}}\,dx = -\arccos x + C \tag{16}$$

$$\int \frac{1}{1+x^2}\,dx = \operatorname{arctg} x + C \tag{17}$$

$$\int \frac{1}{1+x^2}\,dx = -\operatorname{arccotg} x + C \tag{18}$$

Pozn.: v celém dokumentu platí: $C \in \mathbb{R}$.