Tablica integrala

$$\int X^{\alpha} \cdot dx = \frac{x^{\alpha+1}}{\alpha+1} + c \qquad \alpha \neq -1$$

$$\int \frac{dx}{x} = \ln|x| + c \qquad x \neq 0$$

$$\int \frac{dx}{1+x^2} = \operatorname{arctg} x + c$$

$$\int \frac{dx}{1-x^2} = \frac{1}{2}\ln\left|\frac{1+x}{1-x}\right| + c$$

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

$$\int \frac{dx}{\sqrt{x^2 \pm 1}} = \ln\left|x + \sqrt{x^2 \pm 1}\right| + c$$

$$\int a^x \cdot dx = \frac{a^x}{\ln a} + c \qquad a > 0,\ a \neq 1$$

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

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

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

$$\int \frac{dx}{\sin^2 x} = -\operatorname{ctg} x + c$$

$$\int \frac{dx}{\cos^2 x} = \operatorname{tg} x + c$$

$$\int \operatorname{sh} x \cdot dx = \operatorname{ch} x + c$$

$$\int \operatorname{ch} x \cdot dx = \operatorname{sh} x + c$$

$$\int \frac{dx}{\operatorname{sh}^2 x} = -\operatorname{cth} x + c$$

$$\int \frac{dx}{\operatorname{ch}^2 x} = \operatorname{th} x + c$$

$$\int \cos^{a} x \cdot dx = \frac{\sin at}{a} + c$$

$$\int \sqrt{x^2 \pm 1} \cdot dx = \frac{1}{2} \cdot x \cdot \sqrt{x^2 \pm 1} \pm \frac{1}{2} \cdot \ln\left|x + \sqrt{x^2 \pm 1}\right| + c$$

Integracija racionalnih funkcija

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

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

$$\int \frac{dx}{a^2-x^2} = \frac{1}{2a} \cdot \ln\left|\frac{a+x}{a-x}\right| + c$$