VZORCE PRO INTEGROVÁNÍ

I $\quad \int dx = x + c$

II $\quad \int x^n dx = \dfrac{x^{n+1}}{n+1} + c, \quad n \neq -1$

III $\quad \int \dfrac{1}{x} dx = \ln|x| + c \qquad\qquad (\quad \int \dfrac{f'(x)}{f(x)} dx = \ln|f(x)| + c \quad)$

IV $\quad \int a^x dx = \dfrac{a^x}{\ln a} + c$

V $\quad \int e^x dx = e^x + c$

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

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

VIII $\quad \int \dfrac{1}{\cos^2 x} dx = \operatorname{tg} x + c$

IX $\quad \int \dfrac{1}{\sin^2 x} dx = -\operatorname{cotg} x + c$

X $\quad \int \dfrac{1}{\sqrt{A^2 - x^2}} dx = \arcsin\dfrac{x}{A} + c$

XI $\quad \int \dfrac{1}{\sqrt{x^2 \pm B}} dx = \ln\left|x + \sqrt{x^2 \pm B}\right| + c$

XII $\quad \int \dfrac{1}{A^2 + x^2} dx = \dfrac{1}{A} \operatorname{arctg}\dfrac{x}{A} + c$

XIII $\quad \int \dfrac{1}{A^2 - x^2} dx = \dfrac{1}{2A} \ln\left|\dfrac{A + x}{A - x}\right| + c$

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