

## VZORCE PRO INTEGROVÁNÍ

$$\text{I} \quad \int dx = x + c$$

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

$$\text{III} \quad \int \frac{1}{x} dx = \ln|x| + c$$

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

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

$$\text{VI} \quad \int \sin x dx = -\cos x + c$$

$$\text{VII} \quad \int \cos x dx = \sin x + c$$

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

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

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

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

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

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

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

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