

Vypočítejte integrály:

- 1) $\int x^2 e^{x^3-1} dx$ $\left[\frac{1}{3} e^{x^3-1} + c \right]$
- 2) $\int \frac{\cos x}{\sin^3 x} dx$ $\left[-\frac{1}{2 \sin^2 x} + c \right]$
- 3) $\int \frac{3x}{\sqrt{1-x^2}} dx$ $\left[-3\sqrt{1-x^2} + c \right]$
- 4) $\int \frac{3}{\sqrt{1-4x^2}} dx$ $\left[\frac{3}{2} \arcsin 2x + c \right]$
- 5) $\int \frac{2x+3}{x^2+3x-10} dx$ $\left[\ln|x^2+3x-10| + c \right]$
- 6) $\int \sqrt{x} + \frac{1}{x-1} + 2 dx$ $\left[\frac{2}{3} \sqrt{x^3} + \ln|x-1| + 2x + c \right]$
- 7) $\int \frac{x+1}{x^2+2x+9} dx$ $\left[\frac{1}{2} \ln|x^2+2x+9| + c \right]$
- 8) $\int \frac{3}{x^2+9} dx$ $\left[\operatorname{arctg} \frac{x}{3} + c \right]$
- 9) $\int 10x(x^2+13)^{12} dx$ $\left[\frac{5}{13} (x^2+13)^{13} + c \right]$
- 10) $\int x^2 \ln x dx$ $\left[\frac{1}{3} x^3 \ln x - \frac{1}{9} x^3 + c \right]$
- 11) $\int \frac{2}{3x+9} dx$ $\left[\frac{2}{3} \ln|3x+9| + c \right]$
- 12) $\int \frac{x}{x^2+1} - \frac{1}{x^2+1} dx$ $\left[\frac{1}{2} \ln|x^2+1| - \operatorname{arctg} x + c \right]$
- 13) $\int \frac{4}{(2x+3)^2} dx$ $\left[\frac{-2}{2x+3} + c \right]$
- 14) $\int \frac{4}{\sqrt{1-25x^2}} dx$ $\left[\frac{4}{5} \arcsin 5x + c \right]$
- 15) $\int \sin(3x-2) - e^{2x-1} dx$ $\left[-\frac{1}{3} \cos(3x-2) - \frac{1}{2} e^{2x-1} + c \right]$