

# Fizyka dla firm

## Zadania 42

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Oblicz następujące całki nieoznaczone:

$$\int \left( 5x^2 - 6x + 3 - \frac{2}{x} + \frac{5}{x^2} \right) dx \quad (1)$$

$$\int \frac{x}{1+x^2} dx \quad (2)$$

$$\int \frac{x}{(x^2+3)^6} dx \quad (3)$$

$$\int \frac{x\sqrt{x} - x\sqrt[4]{x}}{\sqrt[3]{x}} dx \quad (4)$$

$$\int \sqrt{3x+1} dx \quad (5)$$

$$\int \frac{x}{\sqrt[3]{2x^2-1}} dx \quad (6)$$

$$\int x\sqrt{1+x^2} dx \quad (7)$$

$$\int \frac{x^2}{\sqrt[5]{x^3+1}} dx \quad (8)$$

$$\int \frac{e^{1/x}}{x^2} dx \quad (9)$$

$$\int x e^{-x^2} dx \quad (10)$$

$$\int \frac{dx}{2 \cos^2 3x} \quad (11)$$

$$\int x \sin(2x^2+1) dx \quad (12)$$

$$\int \sin^5 x \cos x dx \quad (13)$$

$$\int \frac{\cos x}{\sqrt{1+\sin x}} dx \quad (14)$$

$$\int \cos x e^{\sin x} dx \quad (15)$$

$$\int \frac{x^3}{\cos^2 x^4} dx \quad (16)$$

$$\int \frac{dx}{e^x + e^{-x}} \quad (17)$$

$$\int \frac{e^x}{2e^x + 1} dx \quad (18)$$

$$\int \frac{\ln |\operatorname{arc\,tg} x|}{1 + x^2} dx \quad (19)$$

$$\int x e^{x^2} (x^2 + 1) dx \quad (20)$$