

10. hét

Házi feladatok

Határozza meg az alábbi primitív függvényeket:

1.
$$\int \frac{x^2 - 7x + 8}{x^2} dx$$

2.
$$\int e^x \cdot \operatorname{sh} x dx$$

3.
$$\int e^{5x+7} dx$$

4.
$$\int \frac{x - 1}{x^2 - 6x + 27} dx$$

5.
$$\int_0^{\pi/2} \sin(3x) dx$$

6.
$$\int_{-1}^1 \frac{1}{2x - 4} dx$$

7.
$$\int_0^{\pi} \sin^3(x) \cdot \cos(x) dx$$

8.
$$\int_{\pi/2}^{3\pi/2} \operatorname{ctg}(x) dx$$

9.
$$\int_{-\pi/2}^{\pi/2} \cos^2 x \cdot \sin x dx$$

10.
$$\int_2^3 \frac{1}{(2x - 1)^3} dx$$

11.
$$\int_0^1 \frac{1}{x + 1} dx$$

12.
$$\int_0^1 x \cdot e^{x^2/2} dx$$

13.
$$\int_0^{\pi/2} \sin(3x) dx$$

14.
$$\int_{-1}^1 \frac{1}{2x - 4} dx$$

15.
$$\int_0^{\pi} \sin^3(x) \cdot \cos(x) dx$$

16.
$$\int_{\pi/2}^{3\pi/2} \operatorname{ctg}(x) dx$$

17.
$$\int_{-\pi/2}^{\pi/2} \cos^2 x \cdot \sin x dx$$

18.
$$\int_2^3 \frac{1}{(2x - 1)^3} dx$$

19.
$$\int_0^1 \frac{1}{x + 1} dx$$

20.
$$\int_0^1 x \cdot e^{x^2/2} dx$$

21.
$$\int_0^4 \sqrt{3x + 4} dx$$