

11. hét

Házi feladatok

$$1. \int_0^{\pi/2} \sin(3x) dx$$

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

$$5. \int_{-\pi/2}^{\pi/2} \cos^2 x \cdot \sin x dx$$

$$7. \int_0^1 \frac{1}{x+1} dx$$

$$9. \int_0^4 \sqrt{3x+4} dx$$

$$11. \int_0^2 x e^x dx$$

$$13. \int_{-\pi}^{\pi} \cos^4(x) \sin^2(x) dx$$

$$15. \int_0^1 x^n e^{-ax} dx$$

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

$$4. \int_{\pi/2}^{3\pi/2} \operatorname{ctg}(x) dx$$

$$6. \int_2^3 \frac{1}{(2x-1)^3} dx$$

$$8. \int_0^1 x \cdot e^{x^2/2} dx$$

$$10. \int_0^{\pi/2} e^{3x} \cdot \cos x dx$$

$$12. \int_0^1 \sin(2x) e^{-x} dx$$

$$14. \int_0^{\pi} \sin(2x) \cos(x) dx$$

A Példatárban sok-sok hasonló feladat van.

$$1. \int \frac{\sin(x) \cos(x)}{\sqrt{3 + \sin(4x)}} dx$$

$$2. \int \frac{dx}{\prod_{k=1}^n (e^x + k)}$$