

Izračunaj:

1. $\int \frac{x+1}{\sqrt{x}} dx$
2. $\int \frac{\sqrt{x+1}}{x} dx$
3. $\int \sqrt[3]{2x-1} dx$
4. $\int_0^1 |x^2 - x| dx$
5. Nađi F ako je $F'(x) = e^{-x}$ i $F(0) = 0$.
6. $\int_0^{\pi/4} \sin(2x + \frac{\pi}{4}) dx$
7. $\int_0^{\pi/2} \sin^2 x dx$
8. $\int \operatorname{ctgx} dx$
9. $\int_0^2 (x^2 + 1)\sqrt{x+2} dx$
10. $\int_0^1 \frac{\sqrt{x}}{\sqrt{x+1}} dx$
11. $\int_0^1 \frac{dx}{(x+1)\sqrt{x}}$
12. $\int \frac{dx}{\sqrt{e^x+1}}$
13. $\int \frac{x}{x^2+1} dx$
14. $\int_0^1 x^3 \cdot \sqrt{1-x^2} dx$
15. $\int_1^e \frac{\ln^4 x}{x} dx$
16. $\int_0^{\pi/4} \frac{\sin x}{\cos^4 x} dx$
17. $\int_1^e x^3 \cdot \ln x dx$
18. $\int x \cdot \sin(2x) dx$
19. $\int \operatorname{arctgx} dx$
20. $\int x \cdot \operatorname{arcsinx} dx$
21. $\int \frac{x+1}{\sqrt{1-x^2}} dx$

22. $\int \frac{x}{x^4+1} dx$
23. $\int \frac{x dx}{x^2+4x+5}$
24. $\int_1^3 \frac{dx}{\sqrt{4x-x^2}}$
25. $\int \frac{x+1}{\sqrt{x^2+3x+3}} dx$
26. $\int_0^2 x^2 \cdot e^{-2x} dx$
27. $\int \sqrt{x} \cdot e^{-\sqrt{x}} dx$
28. Nađi F ako je $F'(x) = e^{-x} \sin^2 x$ i $F(0) = 0$.
29. $\int e^{\cos x} \sin(2x) dx$
30. $\int \ln(x^2 + x + 1) dx$
31. $\int x \cdot \ln(x^2 + 1) dx$
32. $\int \frac{dx}{x^4+x^2}$
33. $\int \frac{dx}{x^4+x^3}$
34. $\int_0^1 \frac{dx}{x^4+4x^2+3}$
35. $\int_0^1 \frac{x^6 dx}{x^2+1}$
36. $\int_0^1 \frac{dx}{(x^2+x+1)^3}$
37. $\int_0^1 \frac{x^6 dx}{x^2+1}$
38. $\int \frac{dx}{x+4\sqrt{x+5}}$
39. $\int \frac{\sqrt{x}}{x+1} dx$
40. $\int_0^{\pi/4} \sin^4 x dx$
41. $\int_0^{\pi/4} \sin^4 x \cdot \cos^2 x dx$
42. $\int_0^{\pi/4} \sin^4 x \cdot \cos^3 x dx$

$$43. \int_0^{\pi/3} \frac{dx}{\sin x + 2}$$

$$44. \int_0^{\pi/3} \frac{dx}{\sin^2 x + 2}$$

$$45. \int \frac{\operatorname{sh}^2 x}{\operatorname{ch}^4 x} dx$$

$$46. \int \frac{dx}{\operatorname{ch} x + 2}$$

$$47. \int e^x \cdot \sqrt{e^{2x} + 1} dx$$

$$48. \int_0^1 \sqrt{x^2 + 3} dx$$

$$49. \int_0^2 x^2 \cdot \sqrt{2x - x^2} dx$$

$$50. \int_0^1 x \cdot \sqrt{x^4 + 1} dx$$