

ZADACI ZA SAMOSTALNI RAD

Ispitati tok i nacrtati grafik funkcije:

1. $f(x) = \frac{2x}{x^2-1}$

2. $f(x) = \frac{x+2}{2x+1}$

3. $f(x) = \frac{x(x-1)}{x^2+1}$

4. $f(x) = \frac{x^3}{x^2-4}$

5. $f(x) = \frac{(x-1)^2}{x^2+1}$

6. $f(x) = \sqrt{x^3 + 3x^2}$

7. $f(x) = \sqrt{\frac{x^3}{x-2}}$

8. $f(x) = \frac{x-1}{\sqrt{x^2+1}}$

9. $f(x) = \sqrt[3]{\frac{x^2}{x+1}}$

10. $f(x) = x\sqrt[3]{(x+2)^2}$

11. $f(x) = (x-1)\sqrt[3]{x+2}$

12. $f(x) = \sqrt{x} \ln x$

13. $f(x) = x^2(1 - \ln x)$

14. $f(x) = x + \frac{\ln x}{x}$

15. $f(x) = \ln(x + \sqrt{x^2 + 1})$

16. $f(x) = \ln \frac{1+x}{1-x}$

17. $f(x) = x^2 e^{-x} f(x) = e^{\frac{1}{x^2-3x-4}}$

18. $f(x) = \frac{1}{e^{x-1}}$

19. $f(x) = (x^2 - 1)e^{-x^2}$

20. $f(x) = e^{\frac{1}{1-x}}$

21. $f(x) = (x+2)e^{\frac{1}{x}}$

22. $f(x) = e^{\frac{1}{x}} - x$

23. $f(x) = x^{\frac{2}{3}} e^{-x}$

24. $f(x) = x \operatorname{arctg} x$

25. $f(x) = \operatorname{arctg} \frac{x^2}{x^2-1}$