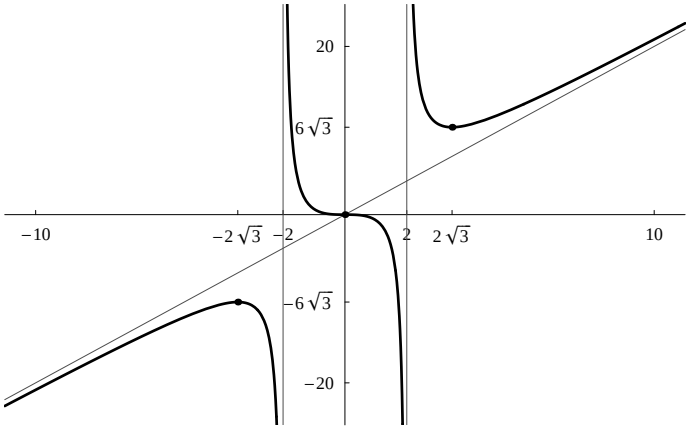
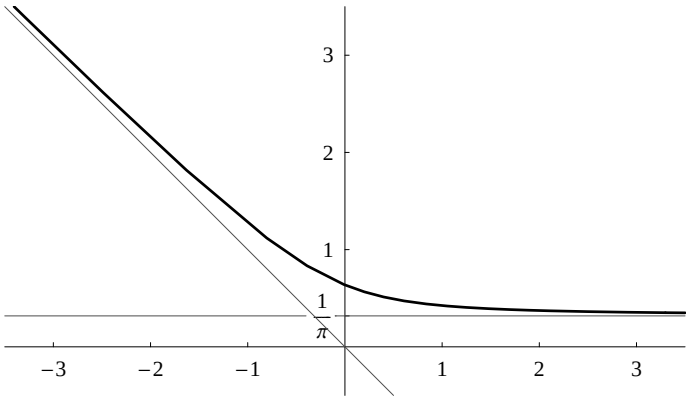
Ispitajte tok i skicirajte graf funkcije zadane formulom:

1. $f(x) = \dfrac{2x^3}{x^2-4}$
2. $f(x) = \dfrac{2}{\pi + 2\operatorname{arctg} x}$
3. $f(x) = \dfrac{1}{e^x - 1}$
4. $f(x) = \sqrt[3]{x^2+1} - \sqrt[3]{x^2}$
5. $f(x) = \sqrt[3]{x^2-1}$
6. $f(x) = \dfrac{x}{\sqrt[3]{x^2-1}}$
7. $f(x) = \arcsin \dfrac{1-x^2}{1+x^2}$
8. $f(x) = (x^2+2)e^{-x^2}$
9. $f(x) = \sqrt{8+x} - \sqrt{8-x}$
10. $f(x) = \dfrac{\sin x}{2+\cos x}$
11. $f(x) = \ln \cos x$
12. $f(x) = x^2 e^{\frac{1}{x}}$
13. $f(x) = \ln \dfrac{x+2}{5-x}$
14. $f(x) = x - \ln\left(\dfrac{x-3}{x-2}\right)^2$
15. $f(x) = \dfrac{1-\ln x}{1+\ln x}$
16. $f(x) = \dfrac{1}{2}x^2 + \ln x$
17. $f(x) = x^{\frac{1}{x}}$
18. $f(x) = \dfrac{e^{\frac{1}{1-x^2}}}{1+x^2}$
19. $f(x) = 2^{\sqrt{x^2+1}-\sqrt{x^2-1}}$
20. $f(x) = x + \sin x$
21. $f(x) = x \sin x$

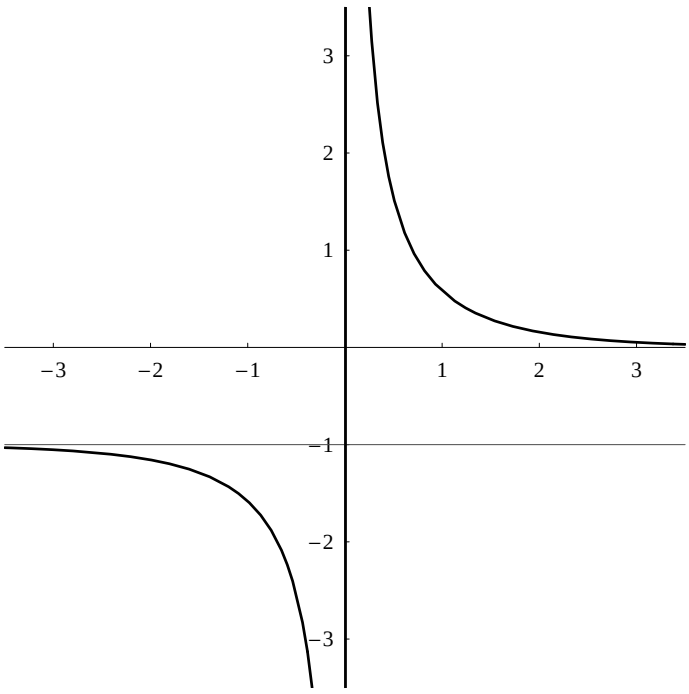
1. $f(x) = \dfrac{2x^3}{x^2-4}$



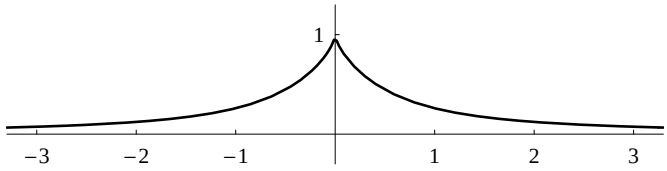
2. $f(x) = \dfrac{2}{\pi + 2\operatorname{arctg} x}$



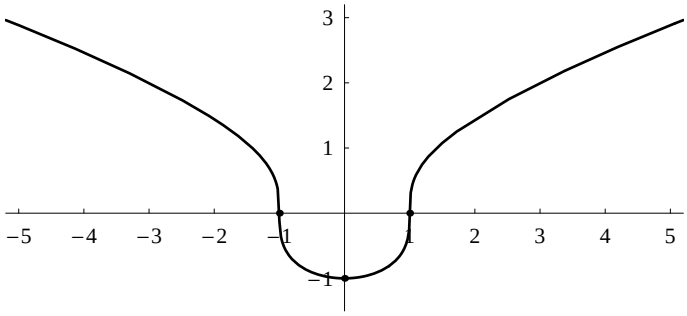
3. $f(x) = \dfrac{1}{e^x - 1}$



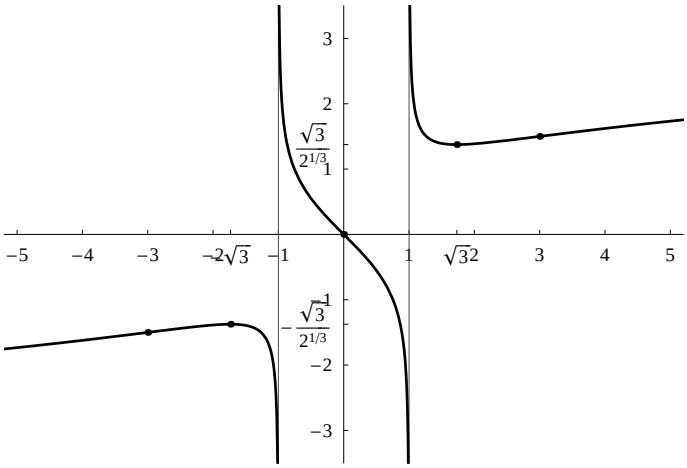
4. $f(x) = \sqrt[3]{x^2+1} - \sqrt[3]{x^2}$



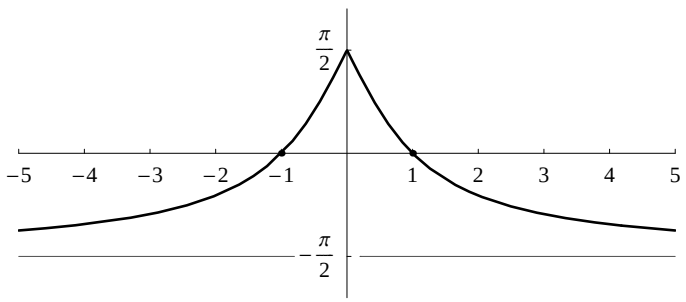
5. $f(x) = \sqrt[3]{x^2-1}$



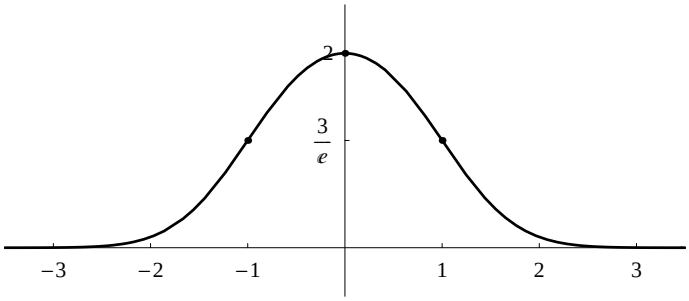
6. $f(x) = \dfrac{x}{\sqrt[3]{x^2-1}}$



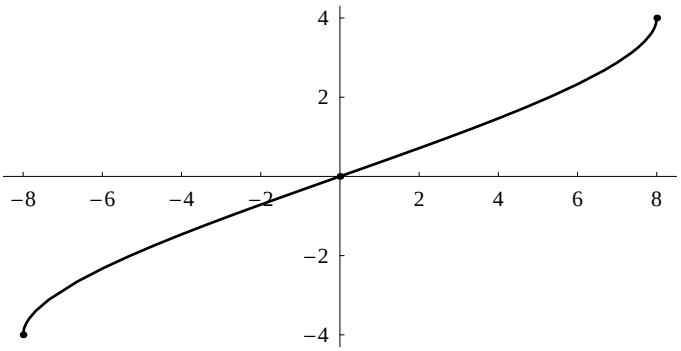
7. $f(x) = \arcsin \dfrac{1-x^2}{1+x^2}$



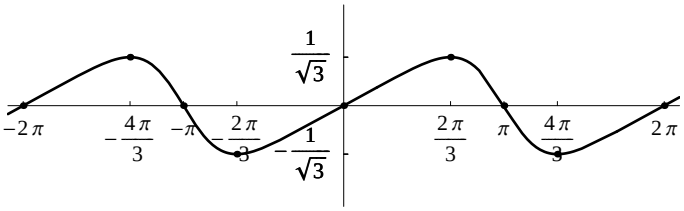
8. $f(x) = (x^2 + 2)e^{-x^2}$



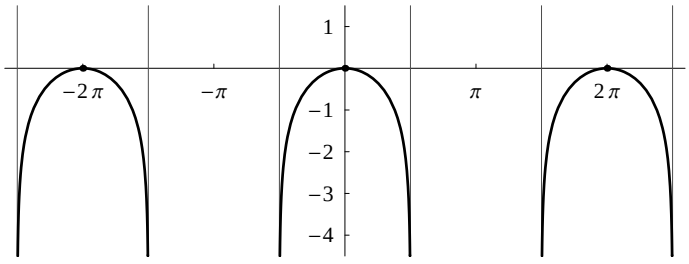
9. $f(x) = \sqrt{8 + x} - \sqrt{8 - x}$



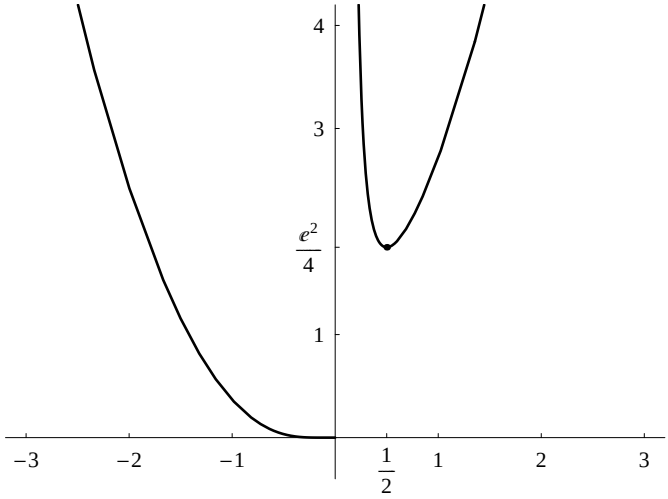
10. $f(x) = \dfrac{\sin x}{2 + \cos x}$



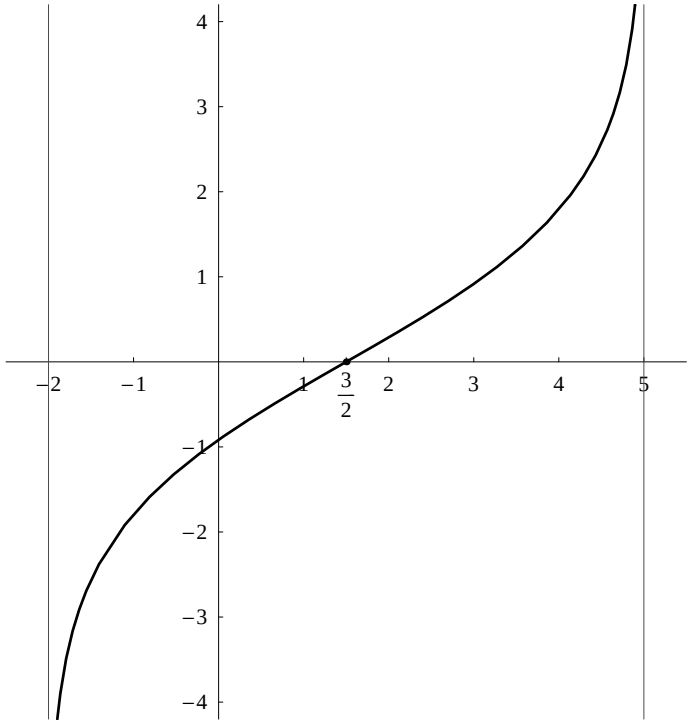
11. $f(x) = \ln \cos x$



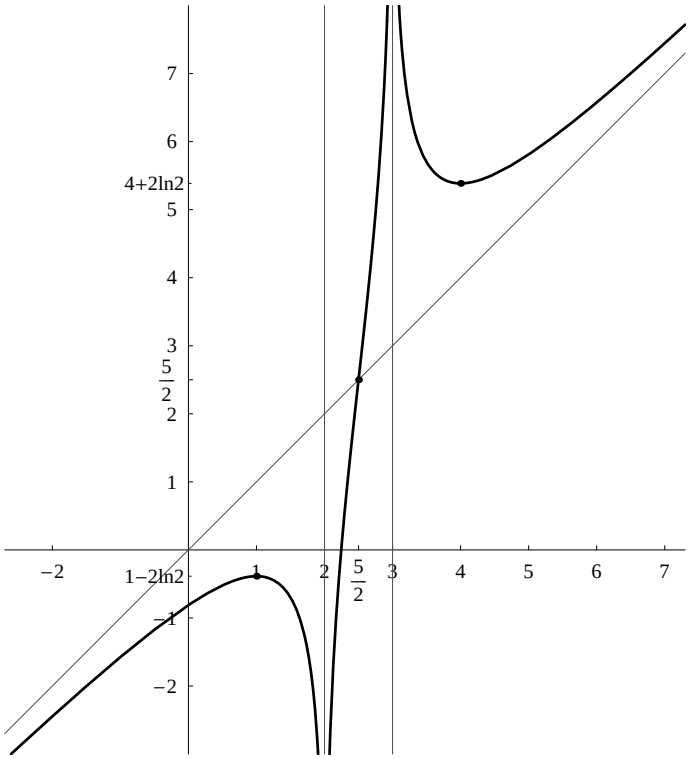
12. $f(x) = x^2 e^{\frac{1}{x}}$



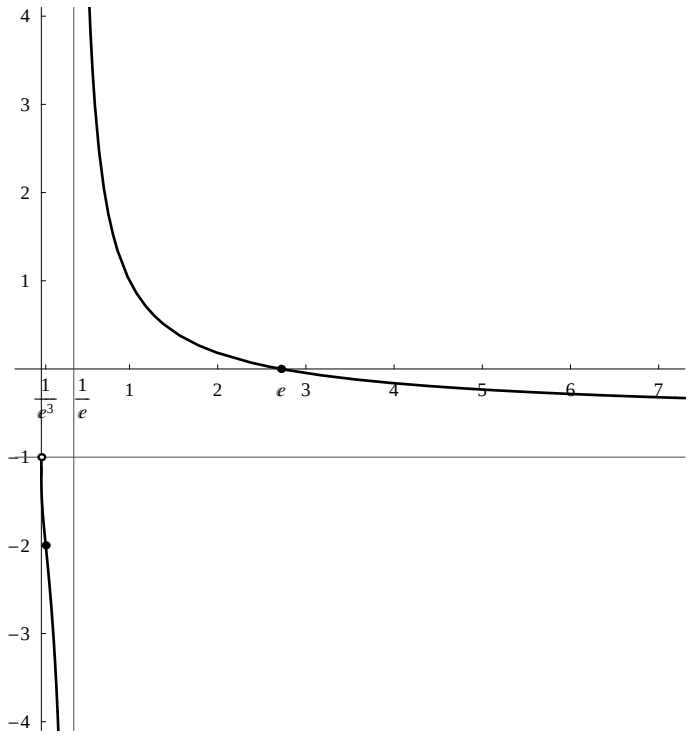
13. $f(x) = \ln \dfrac{x + 2}{5 - x}$



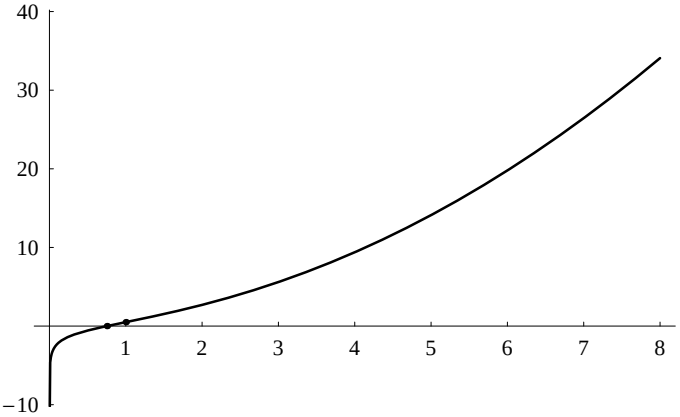
14. $f(x) = x - \ln\left(\dfrac{x-3}{x-2}\right)^2$



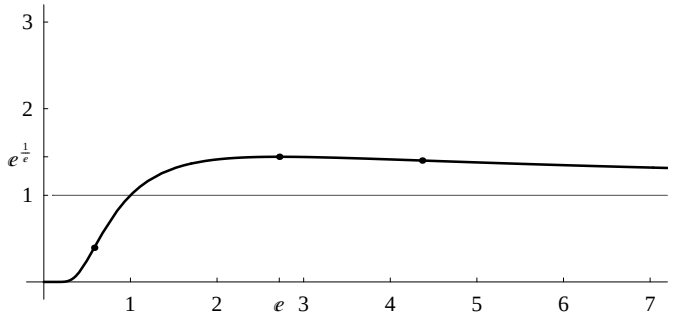
15. $f(x) = \dfrac{1-\ln x}{1+\ln x}$



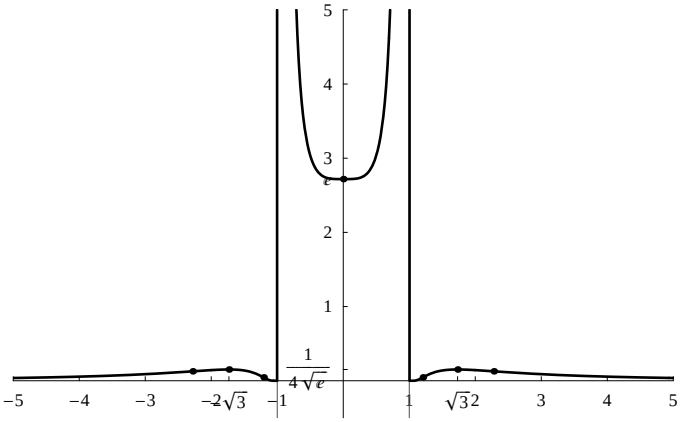
16. $f(x) = \dfrac{1}{2}x^2 + \ln x$



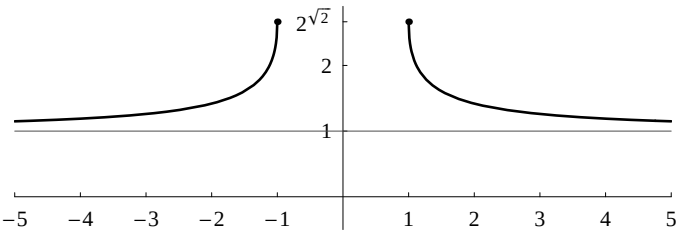
17. $f(x) = x^{\frac{1}{x}}$



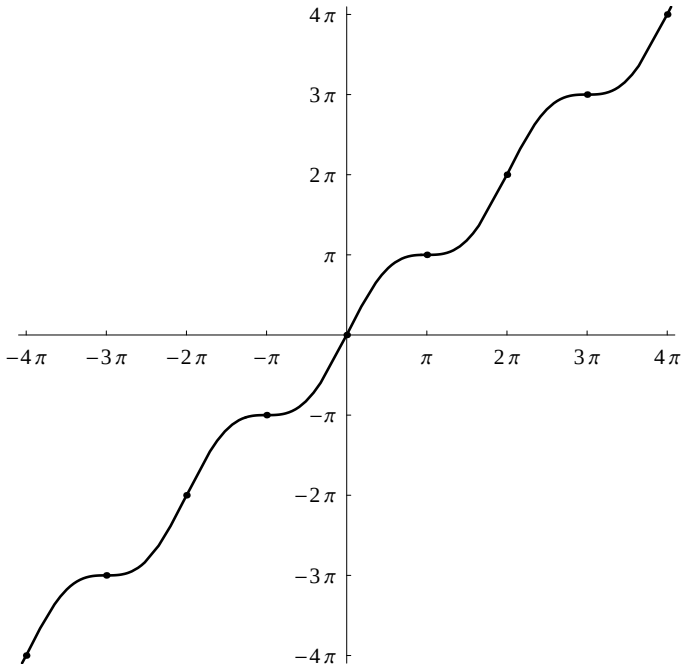
18. $f(x) = \dfrac{e^{\frac{1}{1-x^2}}}{1+x^2}$



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



20. $f(x) = x + \sin x$



21. $f(x) = x \sin x$