Vyšetřete průběh funkce:

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