

(i) Určete definiční obory funkcí

$$f_1(x) = \sqrt{\frac{x+2}{x+1}}, \quad f_2(x) = \frac{\sqrt{x+2}}{\sqrt{x+1}}$$

$$f_3(x) = \frac{\ln(x+1)}{x^2-4}, \quad f_4(x) = \ln(x^2+4), \quad f_5(x) = \ln(x^2-4)$$

$$g_1(x) = \ln \cos x$$

$$g_2(x) = \sqrt{\frac{x^2+5x-6}{x-1}}$$

$$g_3(x) = \arcsin \log x, \quad g_4(x) = \log \arcsin x$$

$$g_5(x) = \operatorname{tg}(2x-4)$$

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

$$h(x) = \sqrt{\log_{\frac{1}{3}}(1-x)}$$

(ii) Nakreslete grafy funkcí

$$2x - |1 - 2x|$$

$$\arcsin \sin x$$

$$\sin \arcsin x$$