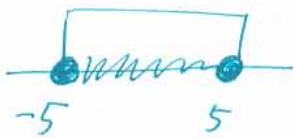


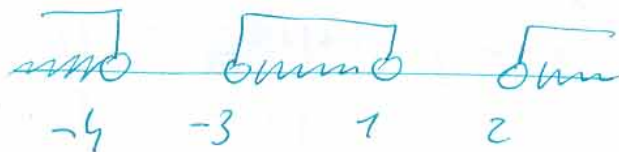
Definiční obor

$$f(x) = \sqrt{25-x^2} + \ln \frac{x^2+2x-3}{x^2+2x-8}$$

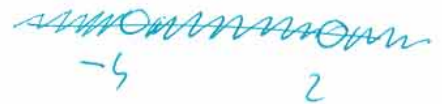
I) odmocnina
 $25-x^2 \geq 0$
 $x^2 \leq 25$
 $|x| \leq 5$



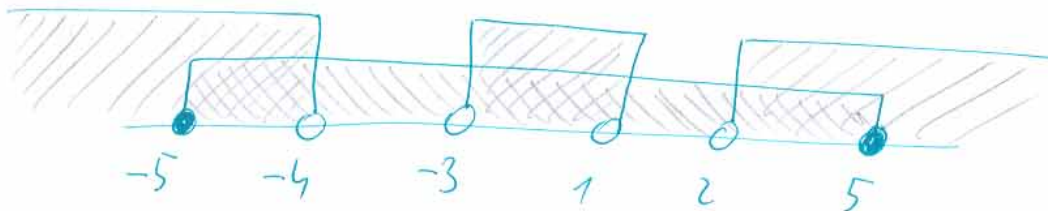
II) ln
 $\frac{x^2+2x-3}{x^2+2x-8} > 0$
nulové body
čít. $x^2+2x-3=0$
 $(x+3)(x-1)=0$
 $x_1=-3$ $x_2=1$
jmv. $x_3=-4$ $x_4=2$



III) jmenovatel
 $x^2+2x-8 \neq 0$
 $(x+4)(x-2) \neq 0$
 $x_1 \neq -4$ $x_2 \neq 2$

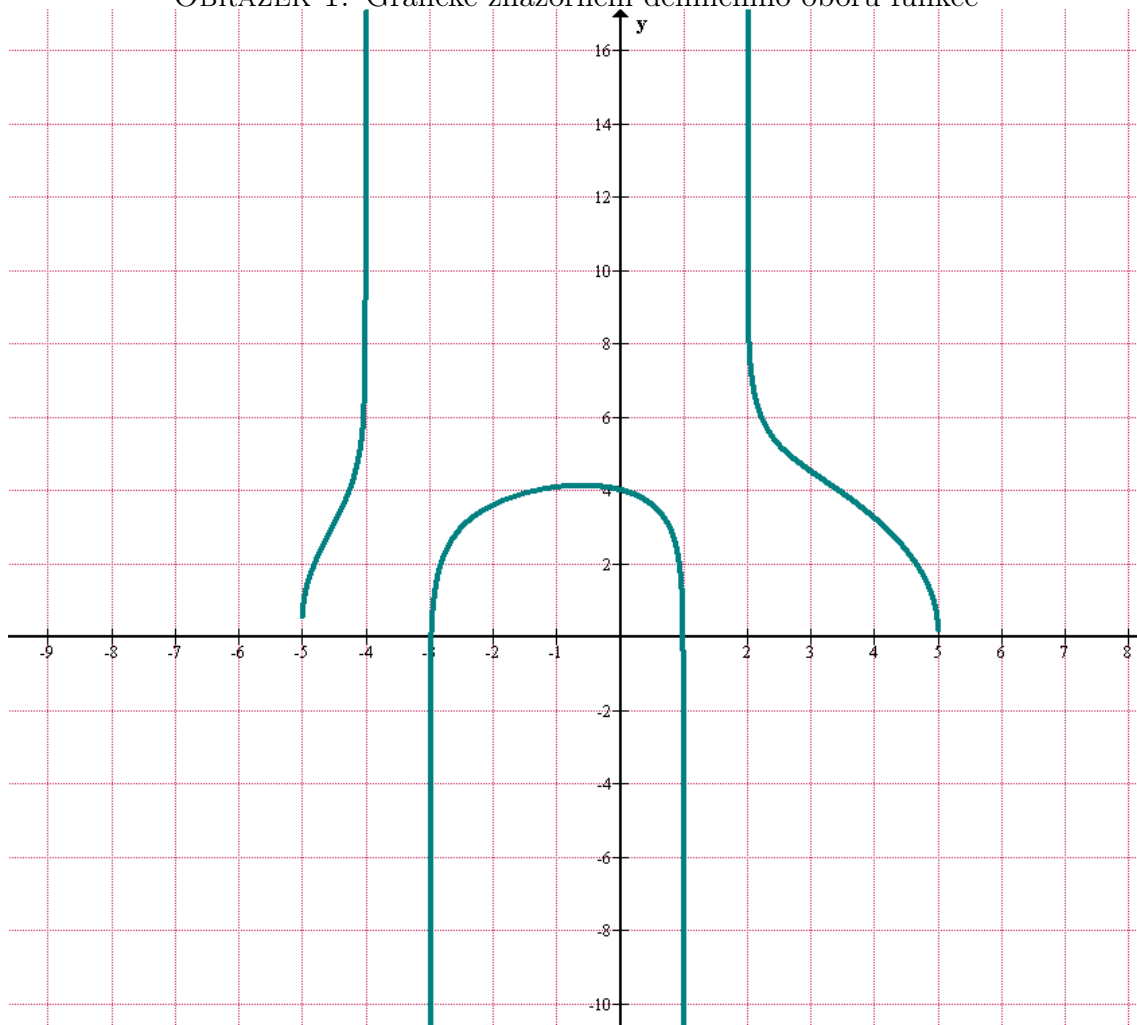


sloučení podmínek



$$\underline{\underline{X \in \langle -5, 4 \rangle \cup \langle -3, 1 \rangle \cup \langle 2, 5 \rangle}}$$

OBRÁZEK 1. Grafické znázornění definičního oboru funkce



Zdroj: program Graph