

Definiční obor

$$f(x) = \sqrt{\frac{x^2 + x - 2}{16 - x^2}} + \log(9 - x^2)$$

i) odmocnina

$$\frac{x^2 + x - 2}{16 - x^2} \geq 0$$

ii) jmenovatel

$$16 - x^2 \neq 0$$

iii) logaritmus

$$9 - x^2 > 0$$

z čitatele:

$$(x^2 + x - 2) = 0$$

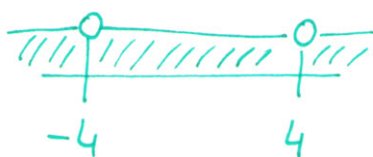
$$(x + 2)(x - 1) = 0$$

$$\underline{x = -2} \quad \underline{x = 1}$$

Nulové body:

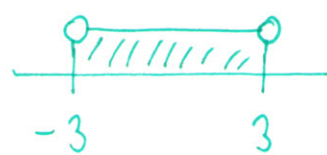
$$16 = x^2$$

$$\underline{x = \pm 4}$$



$$9 = x^2$$

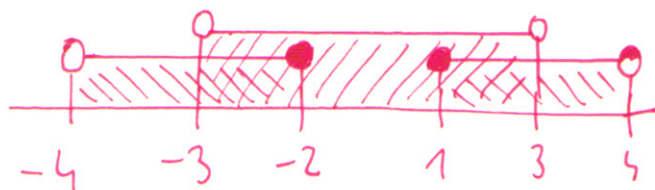
$$\underline{x = \pm 3}$$



ze jmenovatele

$$\underline{x = \pm 4}$$

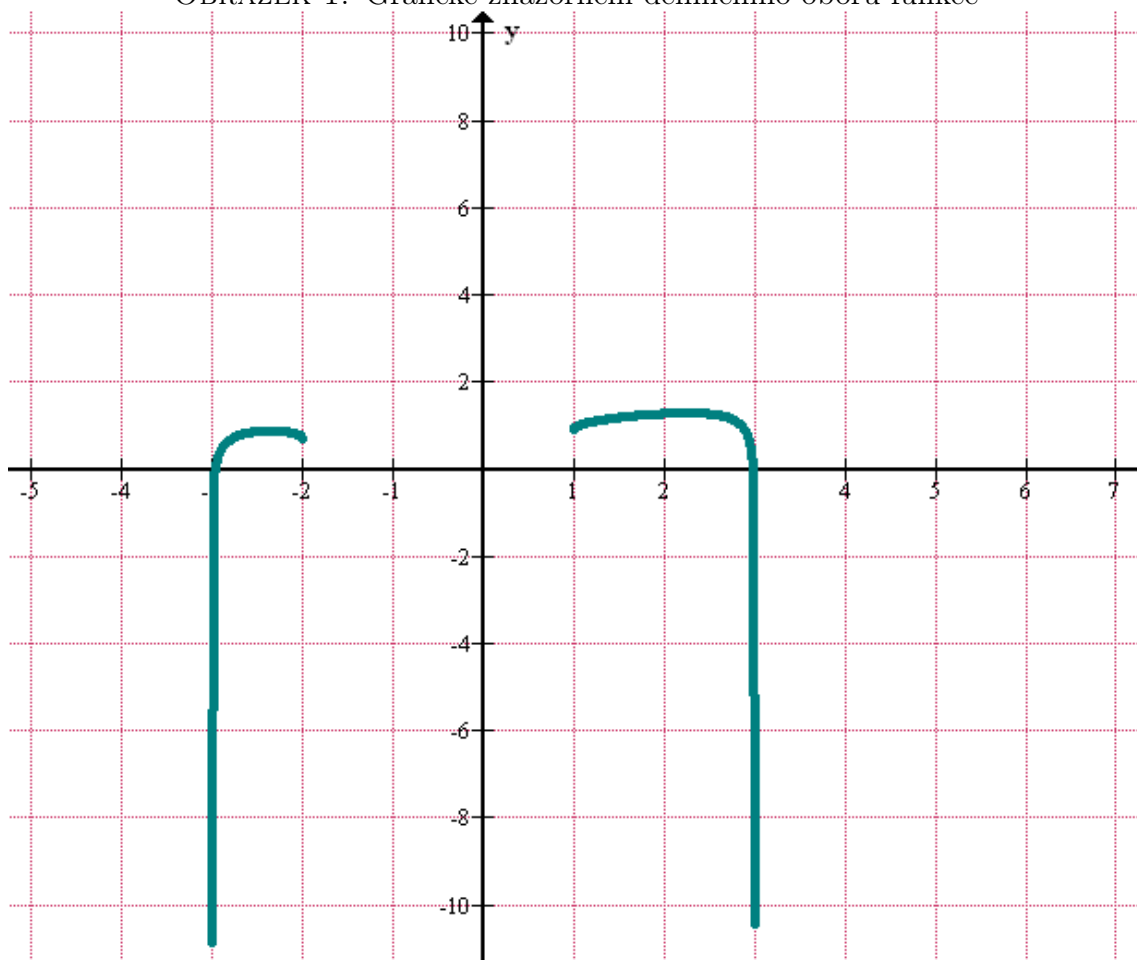
Průnik dělicích podmínek



$$\underline{x \in (-3; -2) \cup (1; 3)}$$

Staženo z: www.matematika-lucerna.cz

OBRÁZEK 1. Grafické znázornění definičního oboru funkce



Zdroj: program Graph