

RIEŠENIE - MINITEST 4 - SK: 9.15 - 12.10.2021

$$f(x) = \frac{x-1}{2x+3}$$

↳ UPRAVME:  $\frac{x-1}{2 \cdot (x+\frac{3}{2})} = \frac{x-1+2,5-2,5}{2 \cdot (x+\frac{3}{2})} = \frac{x+1,5}{2 \cdot (x+\frac{3}{2})} - \frac{2,5}{2 \cdot (x+\frac{3}{2})}$

$$\frac{3}{2} = 1,5 \qquad = \frac{1}{2} - \frac{5}{2 \cdot 2 \cdot (x+\frac{3}{2})} = \frac{1}{2} - \frac{5}{4(x+\frac{3}{2})}$$

↳ VYDELME:  $x-1 : (2x+3) = \frac{1}{2} - \frac{2,5}{2x+3} = \frac{1}{2} - \frac{5}{4(x+\frac{3}{2})}$   $\rightarrow x_0 = -\frac{3}{2}$

$-\left(\frac{2x}{2} + \frac{3}{2}\right)$   
 $0 - 1,5 = -1,5$

→ POSTUP UPRAV NA ZISTENIE ASYMPTOT → 0,25 b.  
 $y_0 = \frac{1}{2}$   
 ASYMPTOTY: 0,25

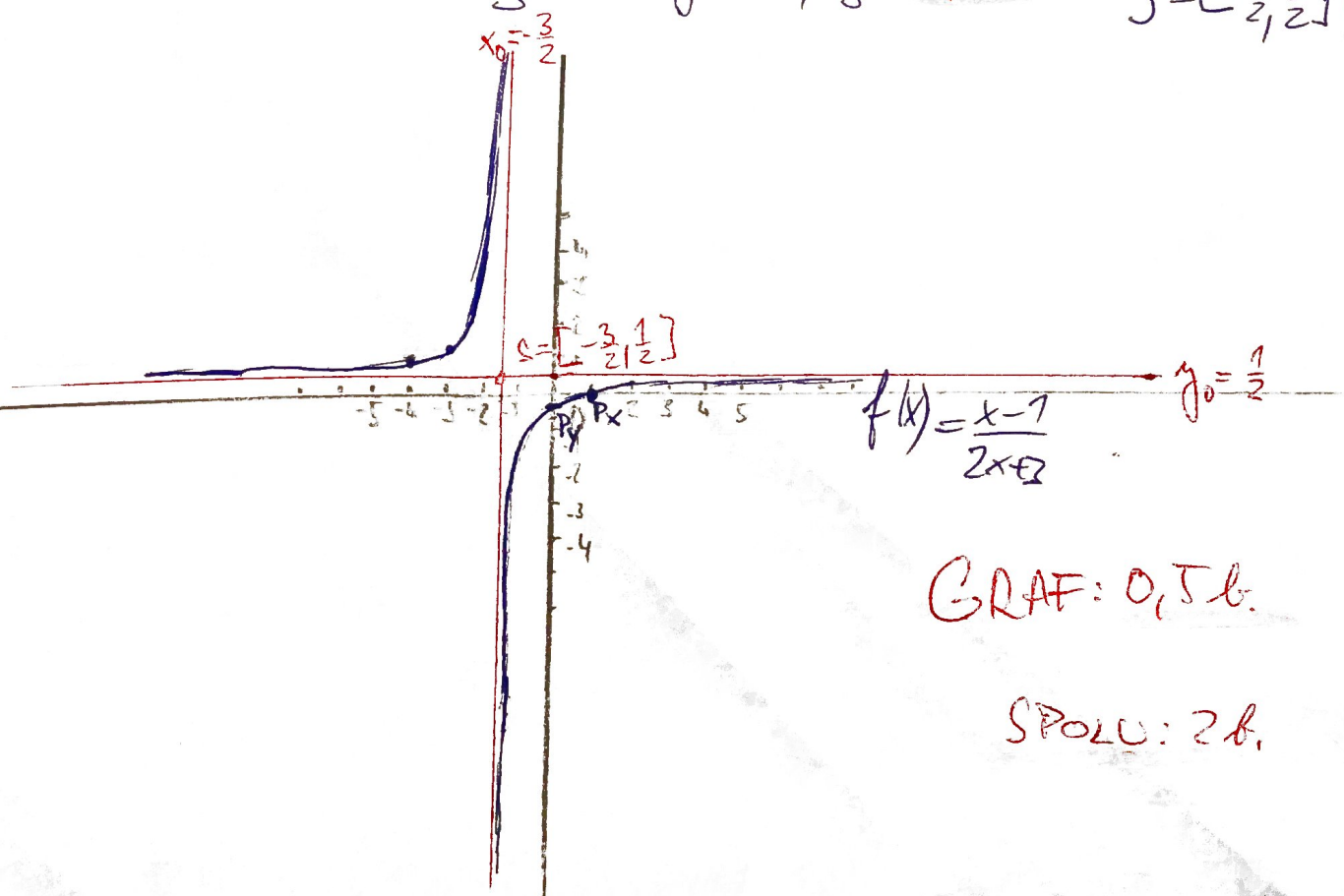
Df: ?  $2x+3 \neq 0 \Rightarrow 2x \neq -3$   
 $x \neq -\frac{3}{2}$

$D_f = \mathbb{R} \setminus \left\{ -\frac{3}{2} \right\}$  0,25 b.

$P_x: y=0: 0 = \frac{x-1}{2x+3} \Rightarrow 0 = x-1 \Rightarrow x=1 \Rightarrow P_x = [1, 0]$  0,25 b.

$P_y: x=0: y = \frac{0-1}{2 \cdot 0+3} = -\frac{1}{3} \Rightarrow P_y = [0, -\frac{1}{3}]$  0,25 b.

$S = \left[ -\frac{3}{2}, \frac{1}{2} \right]$  0,25 b.



GRAF: 0,5 b.

SPOLU: 2 b.

# RIEŠENIE - MINITEST 4 - SK: 12.45 - 12.10.2021

$$f(x) = \frac{x-2}{2x+1} = \frac{\frac{1}{2}(2x+1) - \frac{1}{2} - 2}{2x+1} = \frac{1}{2} - \frac{2,5}{2x+1}$$

$$\frac{x-2}{2x+1} = \frac{1}{2} - \frac{2,5}{2x+1} = \frac{1}{2} - \frac{5}{2(2x+1)} = \frac{1}{2} - \frac{5}{4(x+\frac{1}{2})}$$

$$0 - 2,5$$

Df:

$$\rightarrow \left. \begin{aligned} 2x+1 \neq 0 &\Rightarrow 2x \neq -1 \\ x &\neq -\frac{1}{2} \end{aligned} \right\} D_f = \mathbb{R} \setminus \left\{ -\frac{1}{2} \right\} \quad 0,25 \text{ b.}$$

$$\begin{aligned} y_0 &= \frac{1}{2} \\ x_0 &= -\frac{1}{2} \end{aligned}$$

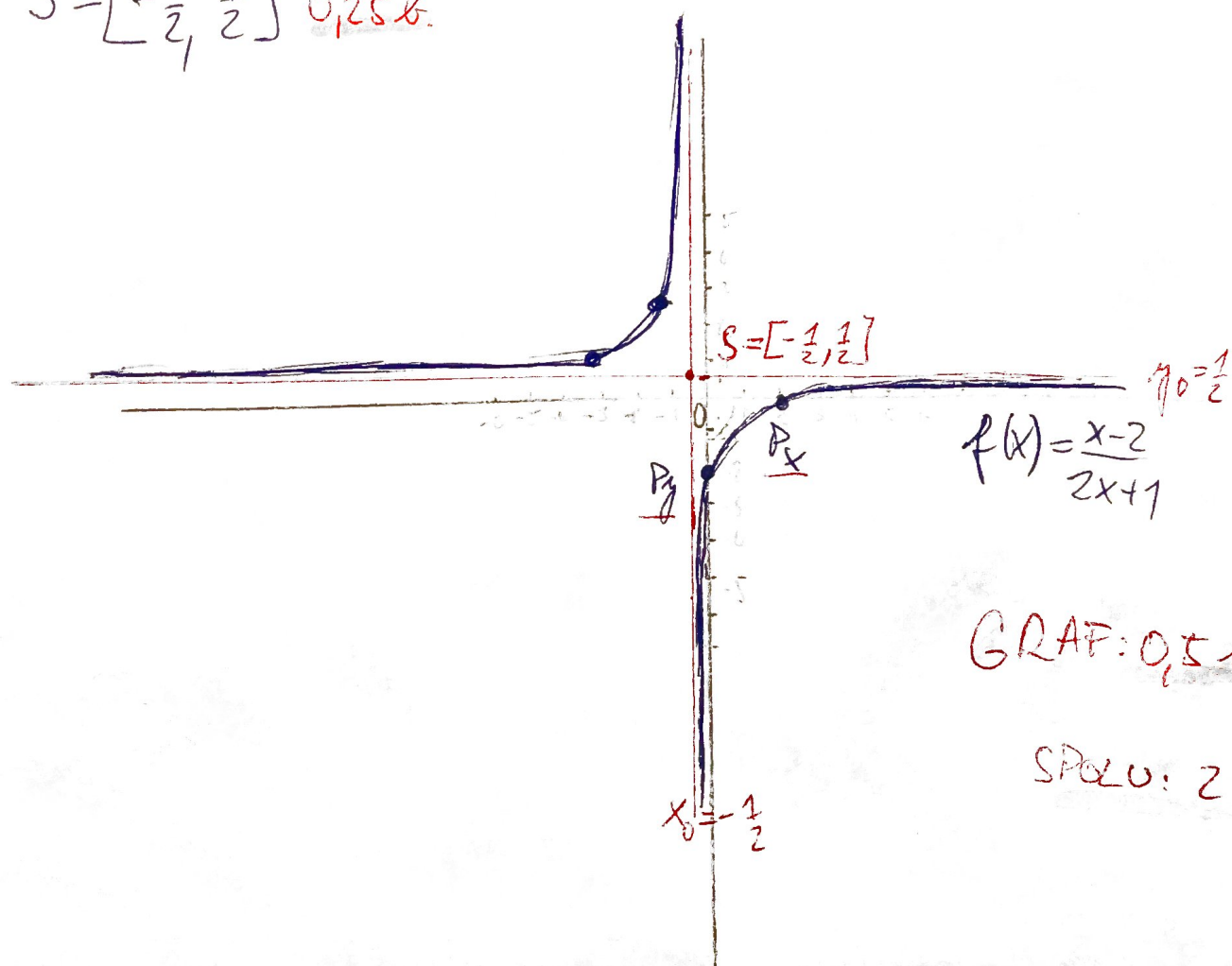
ASYMPTOTA  
0,25 b.

$$0,25 P_x: y=0: 0 = \frac{x-2}{2x+1} \Rightarrow x-2=0 \quad \underline{x=2} \quad P_x = [2, 0]$$

$$0,25 P_y: x=0: y = \frac{0-2}{2 \cdot 0 + 1} = -2 \Rightarrow P_y = [0, -2]$$

SPOLU: 0,5 b.

$$S = \left[ -\frac{1}{2}, \frac{1}{2} \right] \quad 0,25 \text{ b.}$$



GRAF: 0,5 b.

SPOLU: 2 body