

17.11.20.

Линейне

Неједнакосте



204.

a) $3x + 5 < 3x - 2$

$3x - 3x + 5 < -2$

$5 < -2 \quad \perp$

Неједнакоста нема
решетња.

$x = \emptyset$

$\leq, \bullet,]$

$<, \circ,)$

b) $(x+1)^2 < x(x-3)$

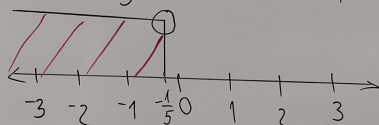
~~$x^2 + 2x + 1 < x^2 - 3x$~~

$2x + 1 < -3x$

$2x + 3x < -1$

$5x < -1 \quad /:5$

$x < -\frac{1}{5}$ или $x < -0,2$



$x \in (-\infty, -\frac{1}{5})$

б) $x \cdot (2 - 3x) \geq -3 \cdot (x - 1)^2$

$2x - 3x^2 \geq -3 \cdot (x^2 - 2x + 1)$

$2x - 3x^2 \geq -3x^2 + 6x - 3$

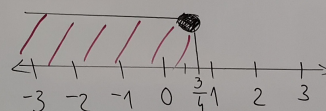
$2x \geq 6x - 3$

1. Носим

$2x - 6x \geq -3$

$-4x \geq -3 \quad /:(-4)$

$x \leq \frac{3}{4}$



$x \in (-\infty, \frac{3}{4}]$

2. Носим

$3 \geq 6x - 2x$

$3 \geq 4x$

$4x \leq 3 \quad /:4$

$x \leq \frac{3}{4}$

17.11.20. Линеарне Неједнакости

207. ~~X~~, >, =

$$\frac{3x-2}{3} - \frac{3x+1}{2} \geq -1 \quad / \cdot 6$$

$$\frac{2}{1} \cdot \frac{3x-2}{3} - \frac{3}{1} \cdot \frac{3x+1}{2} \geq 6 \cdot (-1)$$

$$2 \cdot (3x-2) - 3 \cdot (3x+1) \geq -6$$

$$6x-4-9x-3 \geq -6$$

$$-3x-7 \geq -6$$

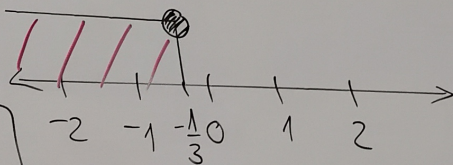
$$-7+6 \geq 3x$$

$$-1 \geq 3x$$

$$3x \leq -1 \quad / :3$$

$$x \leq -\frac{1}{3}$$

$$x \in \left(-\infty, -\frac{1}{3}\right]$$



Зонати:

209. δ , ε

210. δ

Контролни
(једнакости и Неједнакости)

27.11.20.