

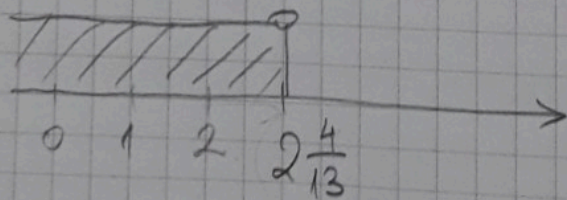
Неједначине - вежбање

(19.11.2020.)

207.
205. б)

207. $\frac{3x-2}{2} - \frac{3x+1}{2} \geq -1 \quad | \cdot 6$
 $2 \cdot \frac{3x-2}{2} - 3 \cdot \frac{3x+1}{2} \geq 6 \cdot (-1)$
 $2(3x-2) - 3(3x+1) \geq -6$
 $6x - 4 - 9x - 3 \geq -6$
 $6x - 9x \geq -6 + 4 + 3$
 $-3x \geq 1 \quad | \cdot (-1)$
 $3x \leq -1 \quad |$
 $x \leq \frac{-1}{3}$
 $x \in (-\infty, -\frac{1}{3}]$

205. б) $\frac{3}{4}x - 1 < 0,1x + \frac{1}{2} \quad | \cdot 4$
 $\frac{3}{4}x - 4 \cdot 1 < 4 \cdot 0,1x + 2 \cdot \frac{1}{2}$
 $3x - 4 < 0,4x + 2$
 $3x - 0,4x < 2 + 4$
 $2,6x < 6$
 $x < \frac{6}{2,6}$
 $x < \frac{30}{13}$
 $x < 2\frac{4}{13}$



$x \in \{1, 2\}$

$$b) \frac{2}{3}x - 1 \leq 0,2x + 2 \quad | \cdot 3$$

$$\frac{2}{3}x - 1 \leq \frac{1}{5}x + 2 \quad | \cdot 15$$

$$5 \cdot \frac{2}{3}x - 15 \cdot 1 \leq 5 \cdot \frac{1}{5}x + 15 \cdot 2$$

$$10x - 15 \leq 3x + 30$$

$$10x - 3x \leq 30 + 15$$

$$7x \leq 45$$

$$x \leq \frac{45}{7}$$

$$x \leq 6 \frac{3}{7}$$

$$x \in \{1, 2, 3, 4, 5, 6\}$$

$$(212) \quad a) (x-1)^2 - (x+1)^2 < 12 - x$$

$$x^2 - 2x + 1 - (x^2 + 2x + 1) < 12 - x$$

$$\cancel{x^2} - 2x + \cancel{1} - \cancel{x^2} - 2x - \cancel{1} < 12 - x$$

$$-4x < 12 - x$$

$$-4x + x < 12$$

$$-3x < 12 \quad | \cdot (-1)$$

$$3x < -12 \quad | : 3$$

$$|x > -4|$$

$$x \in (-4, +\infty)$$

Jawab: (212) 3, 6