

19.11.20

Линейные неравенства

(210)

21

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

$$\frac{2 \cdot 6}{1} \cdot \frac{x-1}{3_1} + \frac{2}{1} \cdot \frac{1-2x}{3_1} \geq \frac{6^1}{1} \cdot \frac{x-3}{2_1} - \frac{3 \cdot 6}{1} \cdot \frac{1}{2_1}$$

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

$$\frac{2x - 2 + 2 - 4x}{?}$$

$$-2x \geq x-6$$

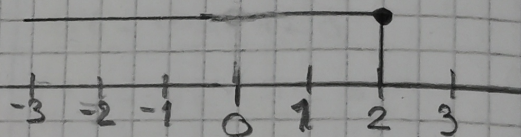
$$6 \geq x+2x$$

$$6 \geq 3x$$

$$3x \leq 6$$

$$10x \leq 6/3$$

$$x \leq 2$$



$$x \in (-\infty, 2]$$

• =]

8)

$$\frac{x-3}{3} > 1 + \frac{x-6}{15} \quad | \cdot 15$$

$$\frac{15^3}{1} \cdot \frac{x-3}{3_1} > \frac{15}{1} \cdot 1 + \frac{15^1}{1} \cdot \frac{x-6}{15_1}$$

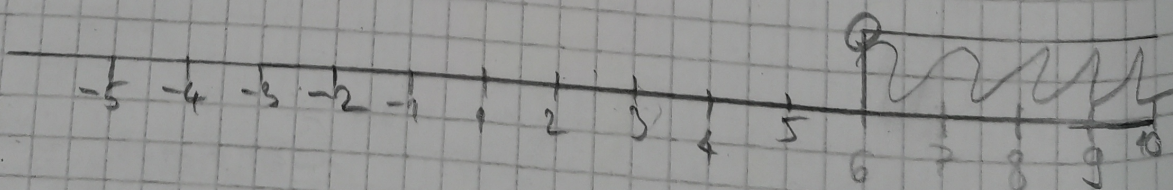
$$5 \cdot (x-3) > 15 + x - 6$$

$$5x - 15 > 9 + x$$

$$5x - x > 9 + 15$$

$$4x > 24 \quad | : 4$$

$$x > 6$$



$$b) \frac{x+1}{5} - \frac{x-3}{5} \leq \frac{2x-2}{5} - \frac{3-x}{2} \quad | \cdot 10$$

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

$$6x+6-20x+30 \leq 2x-12-45+15x$$

$$-4x+36 \leq 27x-54$$

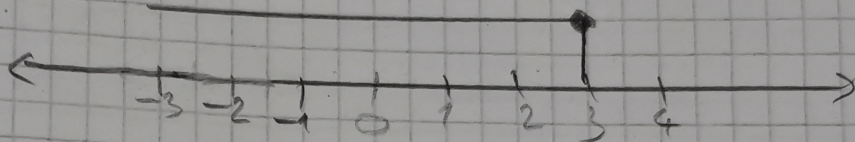
$$36+54 \leq 31x$$

$$90 \leq 31x \quad | :31$$

$$3 \geq x$$

$$x \leq 3$$

$$x \in (-\infty, 3]$$



antwort

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