

Σχολία 1α

$$8x + 4 \leq 16 + 5x$$

$$8x - 5x \leq 16 - 4$$

$$3x \leq 12$$

$$\frac{3x}{3} \leq \frac{12}{3} \quad \# \quad 3 > 0$$

$$x \leq 4$$

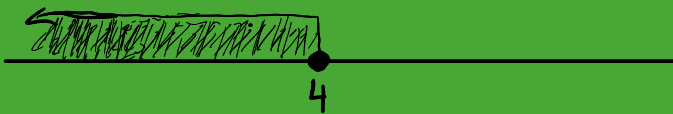
$$\bullet \quad 8x + 4 = 16 + 5x$$

$$8x - 5x = 16 - 4$$

$$3x = 12$$

$$\frac{3x}{3} = \frac{12}{3}$$

$$x = 4$$



(2γ)

$$3y - 1 - (y + 2) < 2(y + 2) + 1$$

$$3y - 1 - y - 2 < 2y + 4 + 1$$

$$2y - 3 < 2y + 5$$

$$2y - 2y < 3 + 5$$

$$0y < 8$$

αληθής για κάθε τιμή του y

$$\text{Εκπ}(2, 3) = 6$$

$$x + 3 + \frac{x+2}{2} - \frac{x+1}{3} > 0$$

$$6 \cdot x + 6 \cdot 3 + \frac{3}{2} \cdot \frac{x+2}{2} - \frac{2}{3} \cdot \frac{x+1}{3} > 6 \cdot 0$$

$$6x + 18 + 3(x+2) - 2(x+1) > 0$$

$$6x + 18 + 3x + 6 - 2x - 2 > 0$$

$$6x + 3x - 2x + 18 + 6 - 2 > 0$$

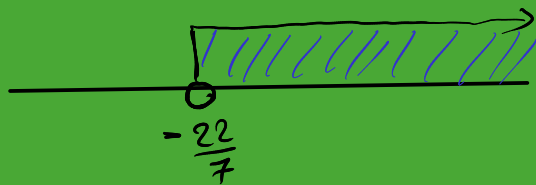
$$7x + 22 > 0$$

$$7x + 22 > 0$$

$$7x > -22$$

$$\frac{7x}{7} > -\frac{22}{7}$$

$$x > -\frac{22}{7}$$



Να βρείτε τις κοινές λύσεις των ανισώσεων

$$3x - 1 > 2(1 - x) + 7 \quad \text{και} \quad 3(1 - x) \geq 6$$

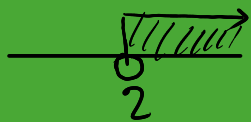
• 1ο Βήμα (λύω χωριστά τις 2 ανισώσεις)

$$\begin{aligned} \triangleright 3x - 1 &> 2(1 - x) + 7 \\ 3x - 1 &> 2 - 2x + 7 \\ 3x + 2x &> 1 + 2 + 7 \end{aligned}$$

$$5x > 10$$

$$\frac{5x}{5} > \frac{10}{5}$$

$$x > 2$$



$$\triangleright 3(1 - x) \geq 6$$

$$3 - 3x \geq 6$$

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

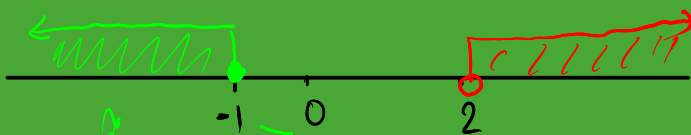
$$-3x \geq 3 \quad \# \text{Προσοχή!}$$

$$\frac{-3x}{-3} \leq \frac{3}{-3} \quad \# -3 < 0$$

$$x \leq -1$$



2ο Βήμα Κοινές λύσεις στον άξονα



Δεν υπάρχουν κοινές λύσεις.

(A) Να βρεθούν οι κοινές λύσεις

$$3x - 5 \leq x + 3$$

και

$$4 < 14 + 5x$$

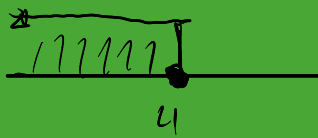
• $3x - 5 \leq x + 3$

$$3x - x \leq 5 + 3$$

$$2x \leq 8$$

$$\frac{2x}{2} \leq \frac{8}{2}$$

$$x \leq 4$$



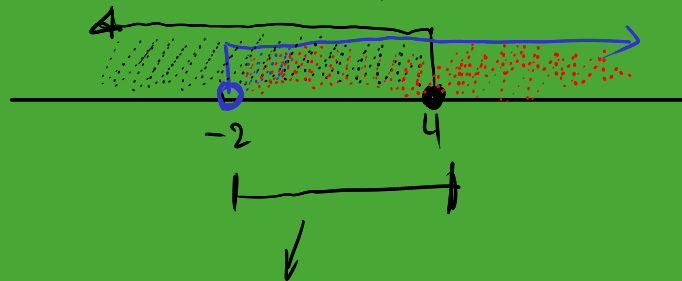
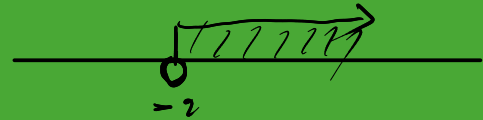
• $4 < 14 + 5x$

$$-5x > 14 - 4$$

$$-5x < 10$$

$$\frac{-5x}{-5} > \frac{10}{-5}$$

$$x > -2$$



$$-2 < x \leq 4$$