

AGU.5 / 2ελ21

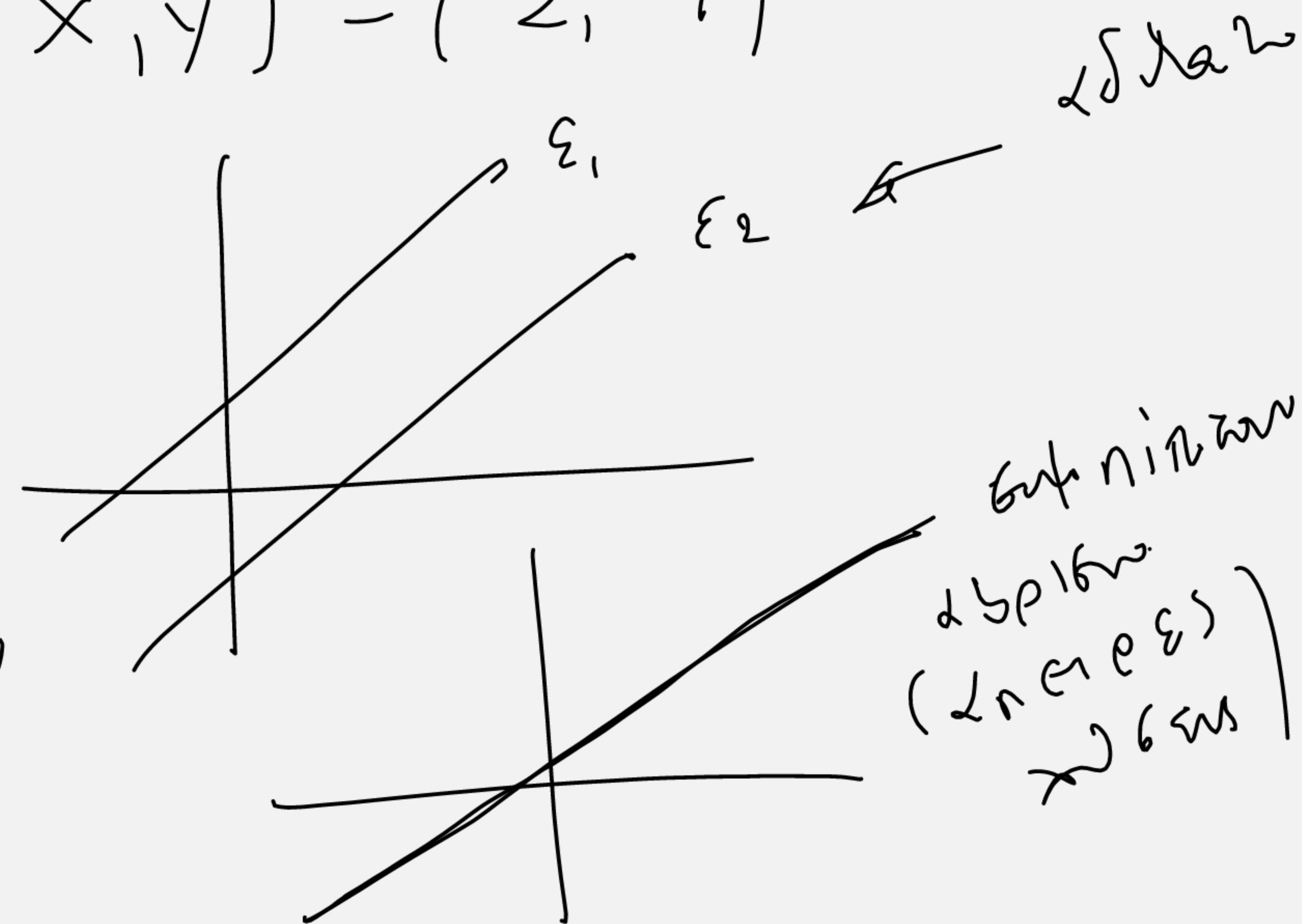
$$ii) \begin{cases} 2y = 3x - 8 \\ x + 3y + 1 = 0 \end{cases} \Leftrightarrow \begin{pmatrix} -3x + 2y & -8 \\ x + 3y & -1 \end{pmatrix} \xrightarrow{(-3)} \begin{cases} 3x - 2y = 8 \\ -3x - 9y = 3 \end{cases} \begin{matrix} (+) \\ \Leftrightarrow \end{matrix}$$

$$\underline{-11y = 11 \Leftrightarrow y = -1}$$

$$\begin{cases} x + 3y = -1 \\ y = -1 \end{cases} \Leftrightarrow \begin{cases} x - 3 = -1 \\ y = -1 \end{cases} \Leftrightarrow \begin{cases} x = 2 \\ y = -1 \end{cases} (x, y) = (2, -1)$$

$$\begin{cases} 2x + 3y = 1 \\ 4x + 6y = 7 \end{cases} \Leftrightarrow \begin{matrix} 4 & 2 \\ -2 & -1 \end{matrix} \begin{cases} 4x + 6y = 2 \\ -4x - 6y = -7 \end{cases}$$

$$\underline{0x + 0y = -5} \text{ Widerspruch}$$



αλ. 3 / Σελ. 21

$$i) \left\{ \begin{array}{l} \frac{x-5}{2} + \frac{2y+1}{7} + 2 = 0 \\ \frac{x+6}{3} - \frac{y-6}{2} = 8 \end{array} \right\}$$

Ποσιν εν εν εἰς ἑκαστον:

$$\frac{x-5}{2} + \frac{2y+1}{7} + 2 = 0 \Rightarrow$$

$$\cancel{14} \frac{x-5}{\cancel{2}} + \cancel{14} \frac{2y+1}{7} + 14 \cdot 2 = 14 \cdot 0 \Rightarrow$$

$$7(x-5) + 2(2y+1) + 28 = 0 \Rightarrow$$

$$7x - 35 + 4y + 2 + 28 = 0 \Rightarrow$$

$$7x + 4y = 35 - 28 - 2 \Rightarrow \boxed{7x + 4y = 5}$$

Ποσιν εν εν 2n εἰς ἑκαστον:

$$\frac{x+6}{3} - \frac{y-6}{2} = 8 \Rightarrow$$

$$\cancel{2} \cdot \frac{x+6}{\cancel{3}} - \cancel{3} \cdot \frac{y-6}{\cancel{2}} = 6 \cdot 8 \Rightarrow$$

$$2(x+6) - 3(y-6) = 48 \Rightarrow$$

$$2x + 12 - 3y + 18 = 48 \Rightarrow$$

$$2x - 3y = 48 - 12 - 18$$

$$\boxed{2x - 3y = 18}$$

$$\left\{ \begin{array}{l} 7x + 4y = 5 \\ 2x - 3y = 18 \end{array} \right\} \dots$$

αβγ 2-Β'ΟΜ / Σελ. 22

26 δωμάτια
68 κρεβάτια

Έστω x το πλήθος των διτλών δωματίων
 $\Rightarrow y \Rightarrow$ τριπλών $\Rightarrow$

$$x + y = 26$$

το πλήθος των κρεβατιών μόνο από τα 2-κλινα δωμάτια είναι $2x$
 $\Rightarrow \Rightarrow \Rightarrow \Rightarrow 3 \Rightarrow \Rightarrow \Rightarrow 3y$

$$2x + 3y = 68$$

$$\begin{cases} x + y = 26 \\ 2x + 3y = 68 \end{cases} \Rightarrow \dots$$

Αβκίν 3, 4, 5 - Β'ΟΜ / Σελ. 22

