

0.12  
4

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

$$\frac{a}{1} \neq \frac{a+3}{a-1}$$

יחידות

$$\begin{aligned} a^2 - a &\neq a + 3 \\ a^2 - 2a - 3 &\neq 0 \\ a &\neq 3, -1 \end{aligned}$$

$$x = 2 - (a-1)y$$

יחידות

$$a(2 - (a-1)y) + (a+3)y = 1$$

$$2a - a(a-1)y + (a+3)y = 1$$

$$y(a+3 - a^2 + a) = 1 - 2a$$

$$y = \frac{1-2a}{-a^2+2a+3} = \frac{1-2a}{-(a-3)(a+1)}$$

$$x = 2 - (a-1) \cdot \frac{1-2a}{-(a-3)(a+1)} = 2 + \frac{(a-1)(1-2a)}{a^2-2a-3} =$$

$$= \frac{2a^2 - 4a - 6 + a - 1 - 2a^2 + 2a}{a^2 - 2a - 3} = \frac{-a-7}{a^2-2a-3}$$

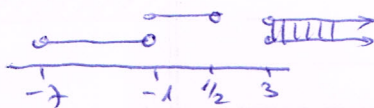
אם  $a > 3$ ,  $-7 < a < -1$  אז  $x > 0$  ו- $y < 0$   
אם  $-1 < a < 3$ , אז  $x < 0$  ו- $y > 0$

$$0 < x = \frac{-a-7}{a^2-2a-3} \quad \begin{array}{c} + \\ - \quad - \quad + \\ -7 \quad -1 \quad 3 \end{array}$$

$$a > 3, \quad -7 < a < -1$$

$$0 < y = \frac{1-2a}{-(a-3)(a+1)} \quad \begin{array}{c} + \\ - \quad + \quad - \\ -1 \quad 1/2 \quad 3 \end{array}$$

$$-1 < a < 1/2, \quad a > 3$$



$$a > 3$$

$a < -1, -1 < a < 3$  אז  $a \neq 3, -1$  אז  $a \leq 3$  אז  $a > 3$