

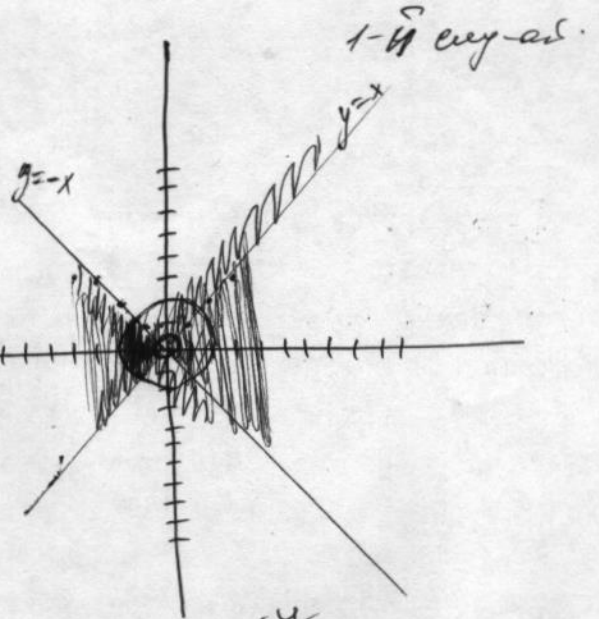
$$x^2 + y^2 < 4 - \text{только внутри } (0,0) R=2$$

$$(x-y)(x+y) > 0$$

$$y=x \quad y=-x$$

$$\begin{cases} x-y < 0 \\ x+y < 0 \\ x-y > 0 \\ x+y > 0 \end{cases}$$

$$\Leftrightarrow \begin{cases} x^2 + y^2 < 4 \\ \begin{cases} y > x \\ y < -x \end{cases} \text{ (1) } \\ \begin{cases} y < x \\ y > -x \end{cases} \text{ (2) } \end{cases}$$



Ответ: $x \in$

т.н. с. о.у.р.о.:

$$\begin{cases} x^2 + y^2 = 4 \\ y = -x \end{cases}$$

$$x^2 + x^2 = 4$$

$$2x^2 = 4$$

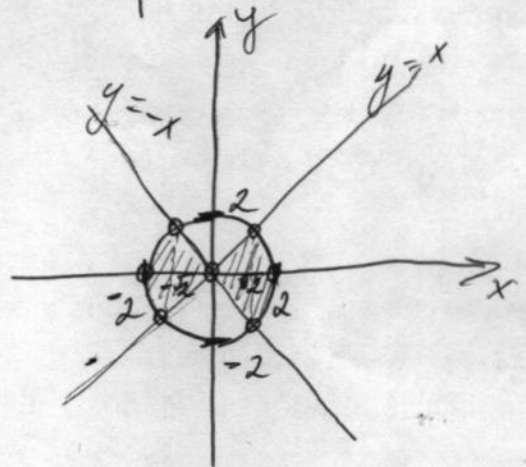
$$x^2 = 2$$

$$x = \pm\sqrt{2}$$

$$\begin{cases} x^2 + y^2 = 4 \\ y = x \end{cases}$$

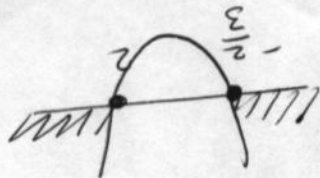
$$x^2 + x^2 = 4$$

$$x = \pm\sqrt{2}$$



Ответ: $x \in (-2, -\sqrt{2}) \cup (-\sqrt{2}, 0) \cup (0, \sqrt{2}) \cup (\sqrt{2}, 2)$

Ответ: $x \in (-\infty, -\frac{3}{2}] \cup [2, +\infty)$



$$x_2 = \frac{6}{4+8} = 2$$

$$x_1 = \frac{6}{4-8} = -\frac{3}{2}$$

$$D = 16 + 48 - 64 = 8$$

$$5x^2 - 4x - 4 \geq 0$$

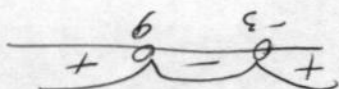
$$x = 0$$

$$x = 0$$

$$x(x+12) > 0$$

$$x = 9$$

$$x = -3$$



Ответ: $x \in (-\infty, -3) \cup (9, +\infty)$

Ответ: $x \in (-\infty, -12) \cup (0, +\infty)$

