

Zadatak 66. Grafički prikaži skup točaka ravnine određenih svakom od sljedećih jednažbi:

1) $y = \sqrt{x+1}$;

2) $y = -2\sqrt{x}$;

3) $y = \sqrt{3-x}$;

4) $y = 1 - \sqrt{-x}$.

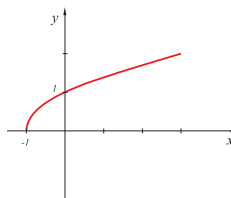
Rješenje.

1)

$$y = \sqrt{x+1} \implies y \geq 0, \quad x+1 \geq 0, \quad x \geq -1$$

$$y = \sqrt{x+1} \quad /^2$$

$$y^2 = x+1 \implies T(-1,0), \quad p = \frac{1}{4}, \quad F\left(-1 + \frac{1}{4}, 0\right), \quad F\left(-\frac{3}{4}, 0\right)$$

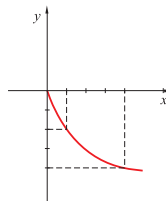


2)

$$y = -2\sqrt{x} \implies y \leq 0, \quad x \geq 0$$

$$y = -2\sqrt{x} \quad /^2$$

$$y^2 = 4x \implies T(0,0), \quad p = 2, \quad F(1,0)$$



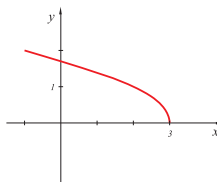
3)

$$y = \sqrt{3-x} \implies y \geq 0, \quad 3-x \geq 0, \quad x \leq 3$$

$$y = \sqrt{3-x} \quad /^2$$

$$y^2 = 3-x$$

$$y^2 = -(x-3) \implies T(3,0), \quad p = -\frac{1}{2}, \quad F\left(3 - \frac{1}{4}, 0\right), \quad F\left(\frac{11}{4}, 0\right)$$



4)

$$y = 1 - \sqrt{-x} \implies y - 1 \leq 0, y \leq 1 \quad -x \geq 0, x \leq 0$$

$$y - 1 = -\sqrt{-x} \quad /^2$$

$$(y - 1)^2 = -x \implies T(0, 1), p = -\frac{1}{2}, F\left(-\frac{1}{4}, 1\right)$$

