

5. Soustavy lineárních rovnic

Řešte soustavy v $\mathbb{R} \times \mathbb{R}$:

- 1)
$$-(2x + 1) - (x - y) = 3x + y + 5$$
$$x + 2y = \frac{1}{2} \cdot (y + 2x) - 1,5$$
$$P = [-1, -1]$$
- 2)
$$2 \cdot (x - 2y) = 5$$
$$\frac{x - 0,5}{y} = 3$$
$$P = [6,5; 2]$$
- 3)
$$\frac{2}{x + 5} = \frac{5}{y + 2}$$
$$\frac{5}{x - 2} = \frac{2}{y - 5}$$
$$P = [-3, 3]$$
- 4)
$$\frac{3x - 4}{3y + 4} = \frac{1}{2}$$
$$\frac{2x - y}{2x + y} = \frac{1}{4}$$
$$P = [5, 6]$$
- 5)
$$2 \cdot (x + y - 1) + 1 = 5y + 4$$
$$-(x + 3y) + 8 = -3 \cdot (x - 3)$$
$$P = \emptyset$$
- 6)
$$\frac{3x - 4y + 3}{4} = 4 - \frac{4x - 2y - 9}{3}$$
$$\frac{2x - y + 3}{3} = 4 + \frac{x - 2y + 3}{4}$$
$$P = [7, 5]$$
- 7)
$$4x - 2 = \frac{5y - 6x}{13} + 3y$$
$$\frac{-2x + 3y}{4} - 12 = \frac{5y - 6x}{6} - 2x$$
$$P = [5, 6]$$
- 8)
$$3 \cdot (x - 2y) + 1 = x + 13$$
$$-2 \cdot (x + y) = 3 \cdot (x - y) - 2$$
$$P = [0, 2]$$