

Zadatak 10. Točkom $T(-4, -1)$ položi pravac tako da ona u omjeru $\lambda = 2$ dijeli odsječak tog pravca između koordinatnih osi.

Rješenje. $T(-4, -1), \lambda = 2$

$$1) \quad x_T = \frac{m + \lambda \cdot 0}{1 + \lambda} \implies -4 = \frac{m}{1 + 2} \quad / \cdot 3$$

$$y_T = \frac{0 + \lambda \cdot n}{1 + \lambda} \implies -1 = \frac{2n}{1 + 2} \quad / \cdot 3$$

$$m = -12$$

$$2n = -3 \implies n = -\frac{3}{2}$$

$$\frac{x}{-12} + \frac{y}{-\frac{3}{2}} = 1$$

$$-\frac{x}{12} - \frac{2y}{3} = 1 \quad / \cdot (-12)$$

$$x + 8y = -12$$

$$x + 8y + 12 = 0$$

$$2) \quad x_T = \frac{0 + \lambda \cdot m}{1 + \lambda} \implies -4 = \frac{2m}{1 + 2} \quad / \cdot 3$$

$$y_T = \frac{n + \lambda \cdot 0}{1 + \lambda} \implies -1 = \frac{n + 0}{1 + 2} \quad / \cdot 3$$

$$2m = -12 \implies m = -6$$

$$n = -3$$

$$\frac{x}{-6} + \frac{y}{-3} = 1 \quad / \cdot (-6)$$

$$x + 2y + 6 = 0$$