

Zadatak 3. Kolika je površina trokuta što ga s koordinatnim osima zatvara pravac kojem je jednažba:

$$1) \frac{x}{11} + \frac{y}{-12} = 1; \quad 2) \frac{x}{-3} + y = 1;$$

$$3) \frac{3}{4}x - \frac{5}{7}y = 1?$$

Rješenje.

$$1) \frac{x}{11} + \frac{y}{-12} = 1 \implies m = -11, \quad n = -12$$

$$P = \frac{|m \cdot n|}{2} = \frac{11 \cdot 12}{2} = 66, \quad P = 66$$

$$2) \frac{x}{-3} + y = 1 \implies m = -3, \quad n = 1$$

$$P = \frac{|m \cdot n|}{2} = \frac{3 \cdot 1}{2} = \frac{3}{2}, \quad P = \frac{3}{2}$$

$$3) \frac{3}{4}x - \frac{5}{7}y = 1$$

$$\frac{x}{\frac{4}{3}} + \frac{y}{-\frac{7}{5}} = 1 \implies m = \frac{4}{3}, \quad n = \frac{7}{5}$$

$$P = \frac{|m \cdot n|}{2} = \frac{\frac{4}{3} \cdot \frac{7}{5}}{2} = \frac{14}{15}, \quad P = \frac{14}{15}$$