

■ Rješenja zadataka 9.3

Zadatak 1. Odredi koordinate točke T u sustavu koji se dobiva translacijom tako da O' bude novo ishodište:

- 1) $P(2, -1)$; $O'(1, 1)$;
- 2) $P(0, 0)$; $O'(-2, 3)$;
- 3) $P(3, -1)$; $O'(3, -1)$;
- 4) $P(-1, -2)$; $O'(-6, -3)$;
- 5) $P(2, 3)$; $O'(2, 0)$;
- 6) $P(3, 4)$; $O'(0, 4)$.

Rješenje.

$$\begin{aligned} 1) \quad x' &= x - p = 2 - 1 = 1 \\ y' &= y - q = -1 - 1 = -2 \\ P'(1, -2) \end{aligned}$$

$$\begin{aligned} 2) \quad x' &= x - p = 0 + 2 = 2 \\ y' &= y - q = 0 - 3 = -3 \\ P'(2, -3) \end{aligned}$$

$$\begin{aligned} 3) \quad x' &= x - p = 3 - 3 = 0 \\ y' &= y - q = -1 + 1 = 0 \\ P'(0, 0) \end{aligned}$$

$$\begin{aligned} 4) \quad x' &= x - p = -1 + 6 = 5 \\ y' &= y - q = -2 + 3 = 1 \\ P'(5, 1) \end{aligned}$$

$$\begin{aligned} 5) \quad x' &= x - p = 2 - 2 = 0 \\ y' &= y - q = 3 - 0 = 3 \\ P'(0, 3) \end{aligned}$$

$$\begin{aligned} 6) \quad x' &= x - p = 3 - 0 = 3 \\ y' &= y - q = 4 - 4 = 0 \\ P'(3, 0). \end{aligned}$$