

Zadatak 3.

Odredi jednadžbe krivulja u početnom sustavu ako je zadana jednadžba krivulje u translatiranom sustavu i koordinate novog ishodišta:

- 1) $y' = x'^2$, $O'(2, -3)$;
- 2) $y' = (x' + 1)^2 - 2$, $O'(-1, -2)$;
- 3) $y' = 2x'$, $O'(1, 1)$;
- 4) $x'^2 + y'^2 = 1$, $O'(3, 0)$.

Rješenje.

1)

$$\begin{aligned}y + 3 &= (x - 2)^2 \\y &= (x - 2)^2 - 3\end{aligned}$$

2)

$$\begin{aligned}y + 2 &= (x + 1 + 1)^2 - 2 \\y &= (x + 2)^2 - 4\end{aligned}$$

3)

$$\begin{aligned}y - 1 &= 2(x - 1) \\y &= 2x - 1\end{aligned}$$

4)

$$\begin{aligned}(x - 3)^2 + (y - 0)^2 &= 1 \\(x' - 3)^2 + y'^2 &= 1\end{aligned}$$