

**Zadatak 13.** Kolika je udaljenost točke  $T(x, 6)$  parabole  $y^2 = 12x$  od njezinog žarišta?

*Rješenje.*

$$T(x, 6)$$

$$y^2 = 12x$$

$$\{T\} \in P \implies 36 = 12x$$

$$x = 3 \implies T(3, 6)$$

$$y^2 = 12x$$

$$2px = 12x \implies p = 6$$

$$F\left(\frac{p}{2}, 0\right) \implies F(3, 0)$$

$$d(T, F) = \sqrt{(3-3)^2 + (6-0)^2} = 6$$