

Zadatak 12. Na kružnicu $(x - 4)^2 + (y + 3)^2 = 8$ položi tangente okomito na pravac $x + y = 0$.

Rješenje. $S(4, -3)$, $r^2 = 8$, $k_t = -\frac{1}{k} = 1$

$$r^2(1 + k_t^2) = (q - kp - l)^2$$

$$8(1 + 1) = (-3 - 4 - l)^2$$

$$16 = 49 + 14l + l^2$$

$$l^2 + 14l + 33 = 0$$

$$l_{1,2} = \frac{-14 \pm \sqrt{196 - 132}}{2}$$

$$l_{1,2} = \frac{-14 \pm 8}{2}$$

$$l_1 = -3, \quad l_2 = -11$$

$$\begin{aligned}x - y - 3 &= 0, \\x - y - 11 &= 0.\end{aligned}$$