



Zadatak 8. Na kružnicu $(x + 2)^2 + (y - 1)^2 = 13$ položi tangente paralelne s pravcem $3x - 2y + 11 = 0$.

Rješenje. $k = \frac{3}{2}$

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

$$13 \left(1 + \frac{9}{4}\right) = (1 + 3 - l)^2$$

$$13 \cdot \frac{13}{4} = (4 - l)^2$$

$$169 = 64 - 32l + 4l^2$$

$$4l^2 - 32l - 105 = 0$$

$$l_{1,2} = \frac{32 \pm \sqrt{1024 + 1680}}{8}$$

$$l_{1,2} = \frac{32 \pm 52}{8}$$

$$l_1 = \frac{21}{2}, \quad l_2 = -\frac{5}{2}$$

$$3x - 2y + 21 = 0,$$

$$3x - 2y - 5 = 0.$$