



Problem:

Find the coordinates of the center and the radius of the circle:

$$x^2 + y^2 - 8x + 6y = 0.$$

Solution:

$x^2 + y^2 - 8x + 6y = 0 \Rightarrow x^2 - 8x + 16 + y^2 + 6y + 9 = 25 \Rightarrow (x - 4)^2 + (y + 3)^2 = 5^2 \Rightarrow O_1(4; -3)$ will be the center of the circle, and $R = 5$ its radius.

