

Rewrite each equation as a standard form equation of a circle. Then state the center and the radius of the circle.

1) $x^2 - 4x + y^2 + 6y - 1 = 0$

2) $x^2 + y^2 - 10x + 14y + 65 = 0$

3) $x^2 + y^2 + 2x + 4y - 31 = 0$

4) $x^2 + y^2 - 4x + 6y + 4 = 0$

5) $x^2 + y^2 + 8x + 20y + 112 = 0$