

Conic Sections CS4: Circles

Find the center and radius of the given circle:

1. $(x - 4)^2 + (y + 2)^2 = 16$

2. $(x - 2)^2 + (y + 6)^2 = 1$

3. $(x + 3)^2 + (y + 2)^2 = 14$

4. $(x + 1)^2 = 9 - y^2$

5. $x^2 + y^2 - 10 = 90$

Write an equation for the circle that satisfies the given conditions:

6. center = (3, 6) and radius = 6

7. center = (2, -4) and radius = $\sqrt{13}$

8. center = (0, 0) and goes through the point (4, 5)

9. endpoints of the diameter are (1, -1) and (-1, 1)

10. endpoints of the diameter are (-2, -4) and (4, 6)