

12.3 Equations of Circles

Date _____ Period _____

Identify the center and radius of each.

1) $(x + 10)^2 + (y - 4)^2 = 25$

2) $(x + 16)^2 + (y + 9)^2 = 4$

3) $(x + 7)^2 + (y - 10)^2 = 9$

4) $(x + 11)^2 + y^2 = 36$

5) $(x + 6)^2 + (y - 16)^2 = 2$

6) $x^2 + y^2 = 144$

Use the information provided to write the standard form equation of each circle.

7) Center: $(-2, -13)$
Radius: 3

8) Center: $(5, -12)$
Radius: 5

9) Center: $(-3, -2)$
Radius: 6

10) Center: $(-6, 13)$
Radius: 5

11) Center: $(2, 12)$
Radius: $\sqrt{11}$

12) Center: $(14, 0)$
Radius: 5

Identify the center and radius of each.

13) $x^2 + y^2 - 4x - 10y - 71 = 0$

14) $x^2 + y^2 - 10x - 8y + 5 = 0$

15) $x^2 + y^2 + 32x - 16y + 311 = 0$

16) $x^2 + y^2 - 4x - 24y + 112 = 0$