

Equations of Circles, Continued

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

1) Center: $(-8, 16)$
Area: 9π

2) Center: $(-6, -4)$
Area: 49π

3) Center: $(-9, 6)$
Circumference: 16π

4) Center: $(12, 11)$
Circumference: 12π

5) Center: $(-14, -1)$
Point on Circle: $(-9, -1)$

6) Center: $(-9, 5)$
Point on Circle: $(-17, 6)$

7) Ends of a diameter: $(11, 2)$ and $(5, 0)$

8) Ends of a diameter: $(9, -5)$ and $(-1, 5)$

9) Ends of a diameter: $(-11, -9)$ and $(-1, -15)$

10) Ends of a diameter: $(4, 18)$ and $(-4, -2)$

Identify the center and radius of each.

11) $x^2 - 2x + y^2 + 10y = 143$

12) $x^2 - 18x + y^2 + 18y = 81$

13) $x^2 - 26x + y^2 + 16y = -197$

14) $x^2 - 8x + y^2 + 12y = -16$

15) $x^2 + 14x + y^2 + 16y = -88$

16) $y^2 + 100 = 22y + 4x - x^2$