

LEVEL: EMERGING

Directions: Identify the center and radius of the circle.

1) $(x - 2)^2 + (y + 7)^2 = 81$

2) $(x + 3)^2 + y^2 = 48$

3) $x^2 + y^2 = 4$

LEVEL: PROFICIENT

Directions: Write the equation of a circle with the given center and radius.

4) Center: (-2,7) Radius: 8

5) Center: (0,5) Radius: 5

6) Center: (3,2) Radius: $2\sqrt{2}$

7) Write the equation of a circle centered at (-3,-4) with a diameter of 18 ft.

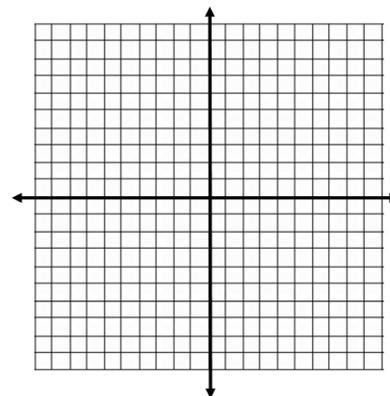
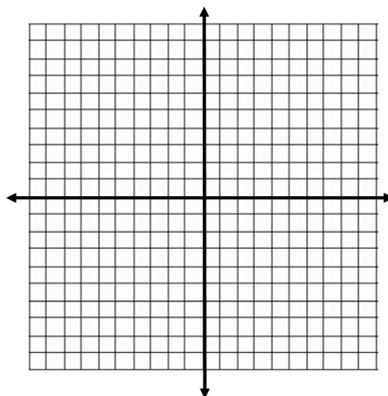
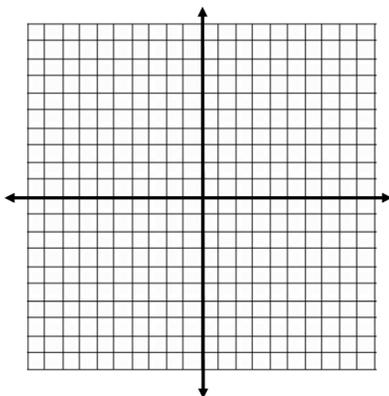
8) Write the equation of a circle centered at (1,-5) with an area of $36\pi \text{ in}^2$.

Directions: Graph the given equation.

9) Center: (0,4) radius: 2

10) $(x - 3)^2 + (y - 1)^2 = 9$

11) $x^2 + y^2 = 25$



Directions: Find the equation of the circle given the center and a point on the circle.

12) Center: $(-13, -2)$
Point: $(-11, -3)$

13) Center: $(7, 4)$
Point: $(0, -2)$

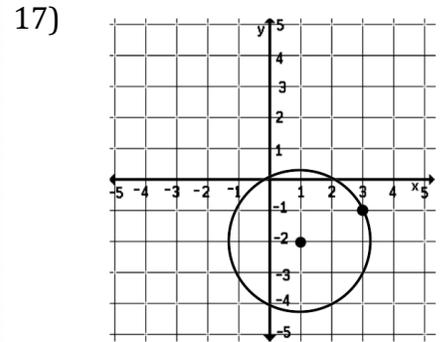
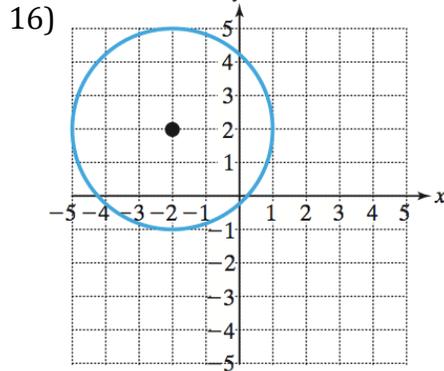
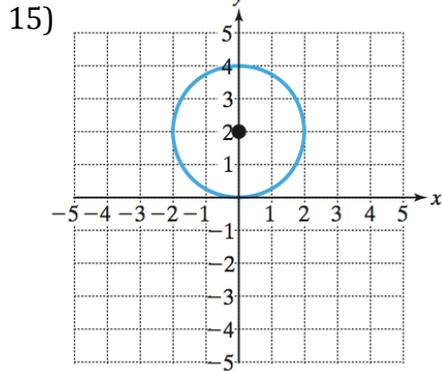
14) Center: $(-16, 13)$
Point: $(-19, 13)$

Equation: _____

Equation: _____

Equation: _____

Directions: Write the equation of the graphed circle.



LEVEL: MASTERY

Directions: Write the equation of the circle given the following information.

18) Center: $(12, 8)$
Area: 25π

19) Endpoints of Diameter:
 $(1, 8)$ and $(6, -4)$

20) Endpoints of Diameter:
 $(-1, -7)$ and $(3, 1)$

Equation: _____

Equation: _____

Equation: _____

Directions: Find the area of the circle given its description.

21) Center: $(-6, -12)$
Point: $(-2, -12)$

22) Center: $(-3, 2)$
Point: $(5, -8)$

23) Center: $(7, 11)$
Point: $(-4, 9)$

Area: _____

Area: _____

Area: _____