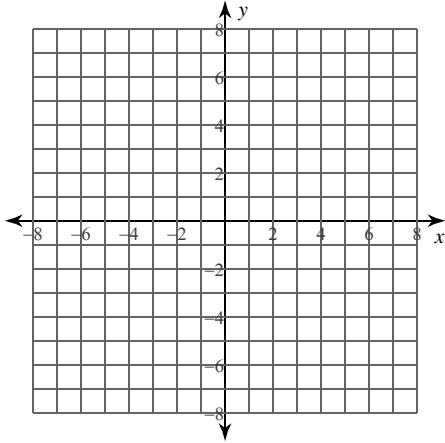


Circles

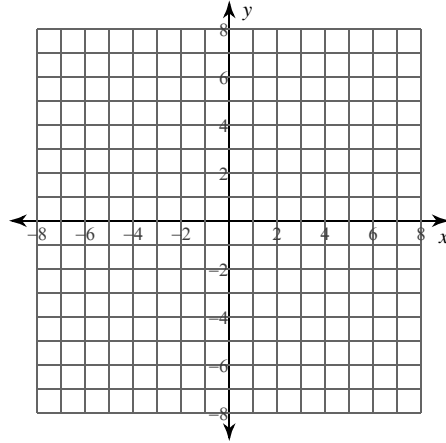
Date _____ Period _____

Identify the center and radius of each. Then sketch the graph.

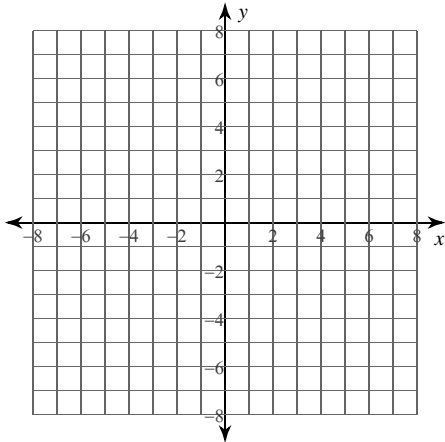
1) $(x + 2)^2 + (y - 1)^2 = 9$



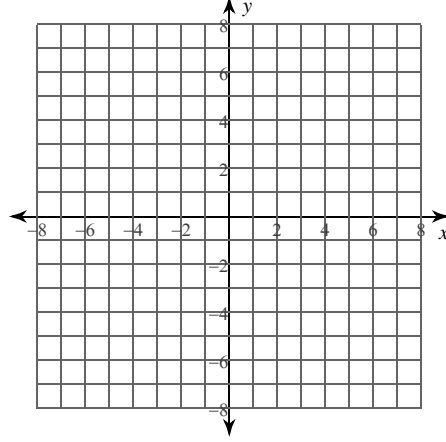
2) $(x + 3)^2 + (y + 4)^2 = 5$



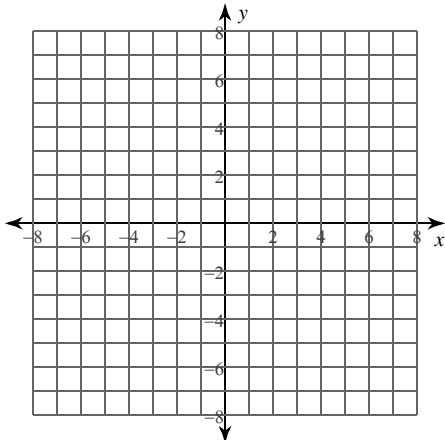
3) $(x - 2)^2 + (y + 3)^2 = 1$



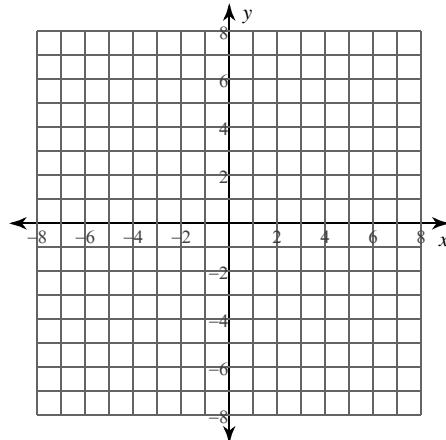
4) $x^2 + y^2 - 6y = 0$



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



6) $x^2 + y^2 - 4x - 14 = 0$



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

7) Center: $(-13, -14)$
Radius: 1

8) Center: $(15, -8)$
Area: 16π

9) Center: $(-2, 9)$
Point on Circle: $(-5, 18)$

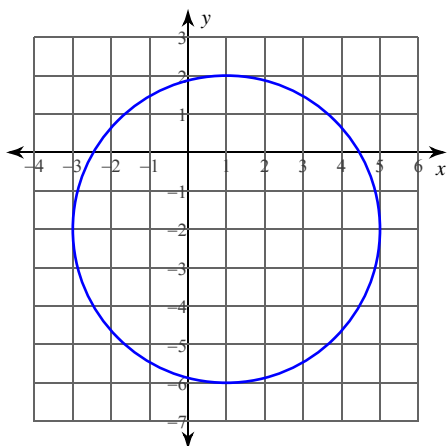
10) Center: $(13, 7)$
Tangent to $y = 11$

11) Center lies in the second quadrant
Tangent to $x = -14$, $y = -4$, and $x = 8$

12) Ends of a diameter: $(11, -6)$ and $(1, 14)$

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

13)



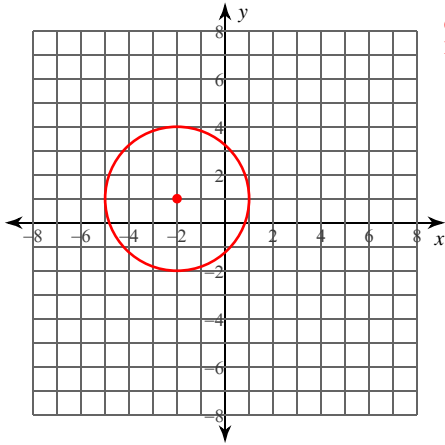
14) Three points on the circle:
 $(7, -4)$, $(-3, -4)$, and $(6, -7)$

Circles

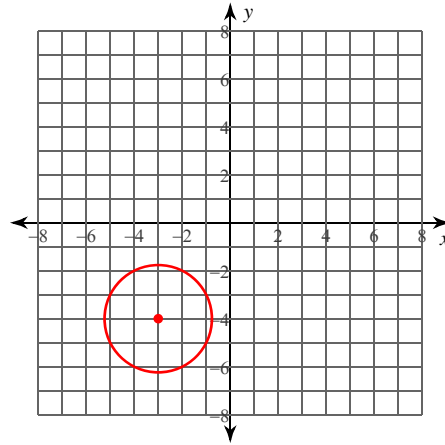
Date _____ Period _____

Identify the center and radius of each. Then sketch the graph.

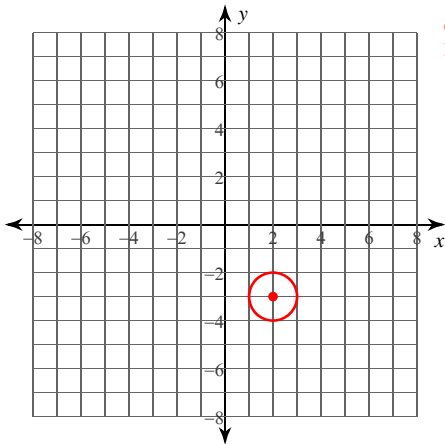
1) $(x + 2)^2 + (y - 1)^2 = 9$

Center: $(-2, 1)$
Radius: 3

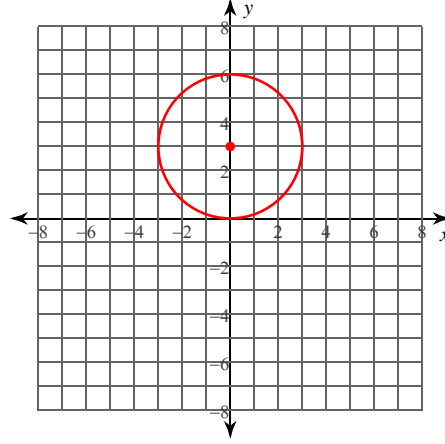
2) $(x + 3)^2 + (y + 4)^2 = 5$

Center: $(-3, -4)$
Radius: $\sqrt{5}$

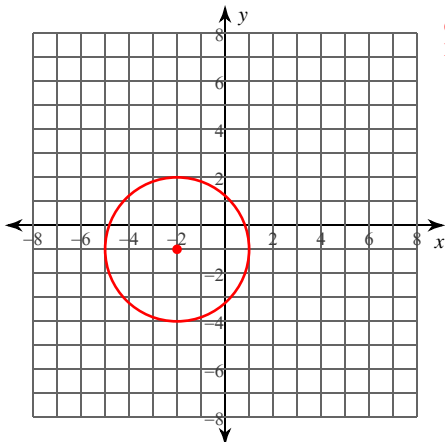
3) $(x - 2)^2 + (y + 3)^2 = 1$

Center: $(2, -3)$
Radius: 1

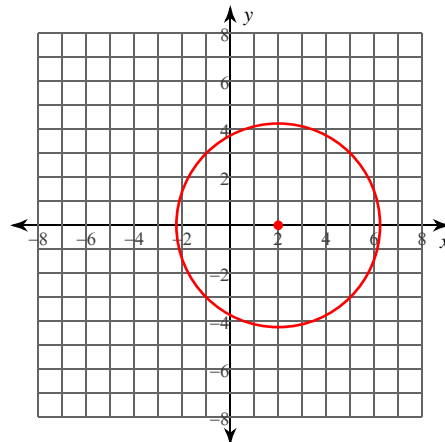
4) $x^2 + y^2 - 6y = 0$

Center: $(0, 3)$
Radius: 3

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

Center: $(-2, -1)$
Radius: 3

6) $x^2 + y^2 - 4x - 14 = 0$

Center: $(2, 0)$
Radius: $3\sqrt{2}$

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

7) Center: $(-13, -14)$

Radius: 1

$$(x + 13)^2 + (y + 14)^2 = 1$$

8) Center: $(15, -8)$

Area: 16π

$$(x - 15)^2 + (y + 8)^2 = 16$$

9) Center: $(-2, 9)$

Point on Circle: $(-5, 18)$

$$(x + 2)^2 + (y - 9)^2 = 90$$

10) Center: $(13, 7)$

Tangent to $y = 11$

$$(x - 13)^2 + (y - 7)^2 = 16$$

11) Center lies in the second quadrant

Tangent to $x = -14$, $y = -4$, and $x = 8$

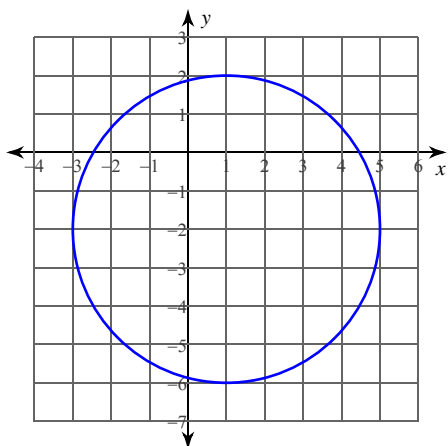
$$(x + 3)^2 + (y - 7)^2 = 121$$

12) Ends of a diameter: $(11, -6)$ and $(1, 14)$

$$(x - 6)^2 + (y - 4)^2 = 125$$

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

13)



$$x^2 + y^2 - 2x + 4y - 11 = 0$$

14) Three points on the circle:

$(7, -4)$, $(-3, -4)$, and $(6, -7)$

$$x^2 + y^2 - 4x + 8y - 5 = 0$$