

Write the standard form of the equation of each circle whose information is given.

1. Center:  $(-2, 4)$   
Radius: 6

2. Center:  $(1, 0)$   
Radius: 2

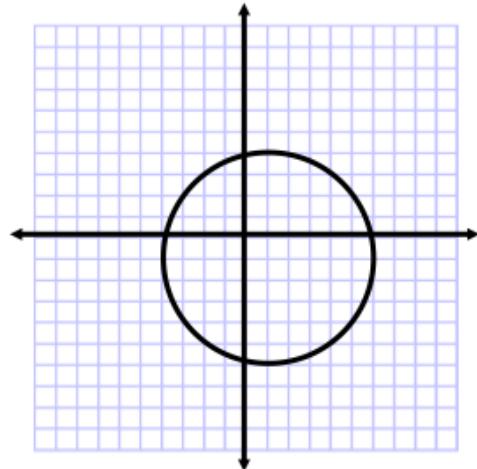
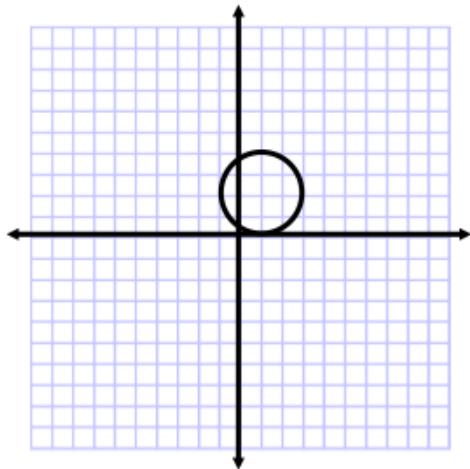
3. Center:  $(0, 0)$   
Radius: 3

4. Center:  $(-3, -4)$   
Radius:  $\sqrt{7}$

Find the center and radius of each circle. Write the standard form of the equation.

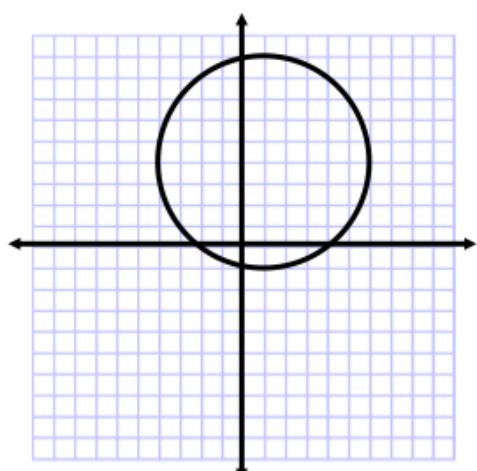
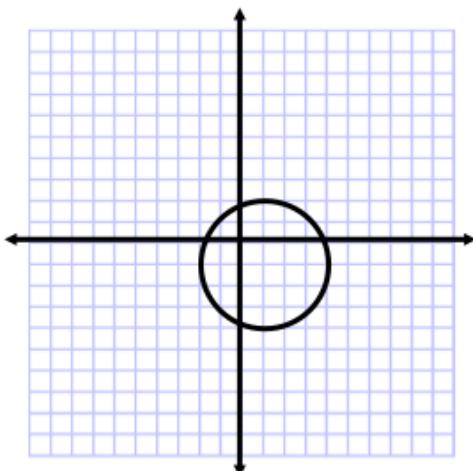
5.

6.



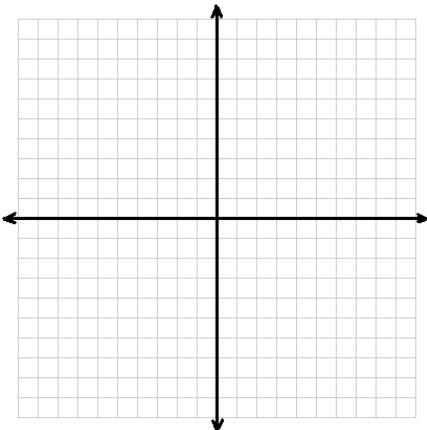
7.

8.

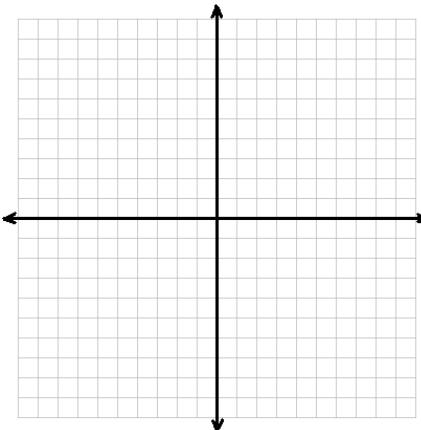


Graph each given the standard form of the equation.

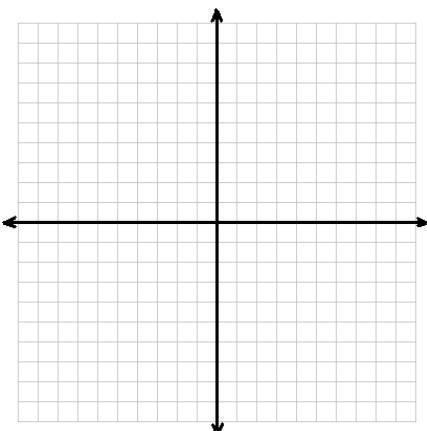
9.  $x^2 + y^2 = 36$



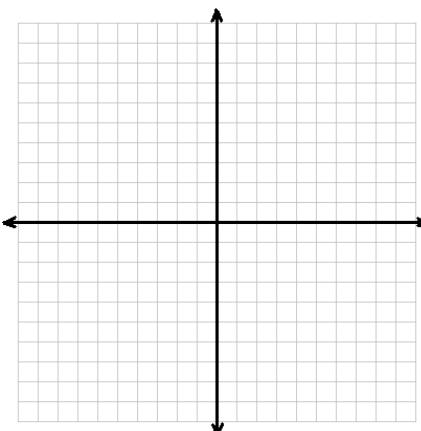
10.  $(x - 4)^2 + (y - 1)^2 = 25$



11.  $x^2 + (y - 3)^2 = 64$

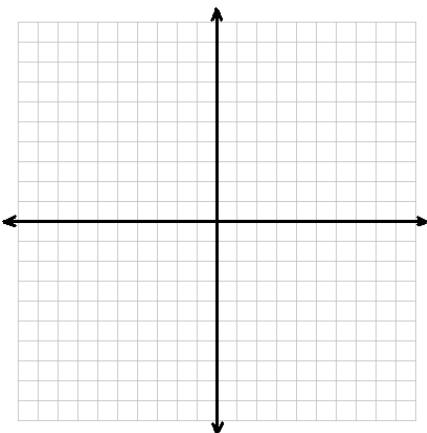


12.  $(x + 3)^2 + (y - 2)^2 = 81$

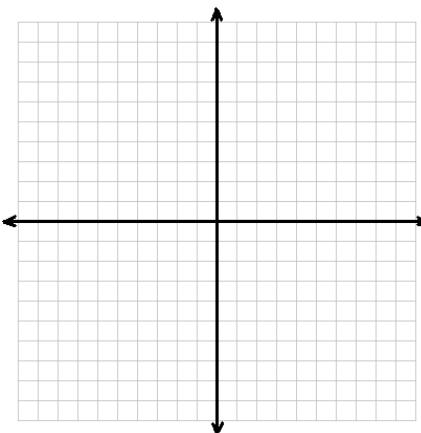


(Honors) Complete the square to find the standard form of each equation, then graph.

13.  $x^2 + y^2 - 6x + 2y + 1 = 0$



14.  $x^2 + y^2 + 10x + 4y + 4 = 0$



## Answer Key

1.  $(x + 2)^2 + (y - 4)^2 = 36$

3.  $x^2 + y^2 = 9$

5. Center:  $(1, 2)$

Radius: 2

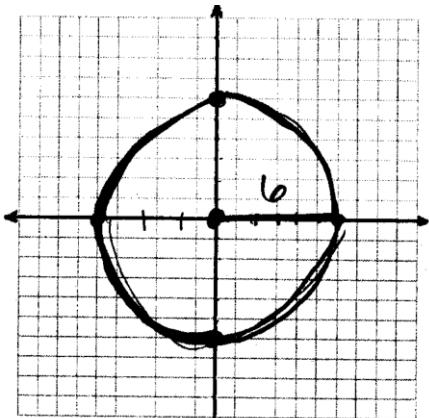
$$(x - 1)^2 + (y - 2)^2 = 4$$

7. Center:  $(1, -1)$

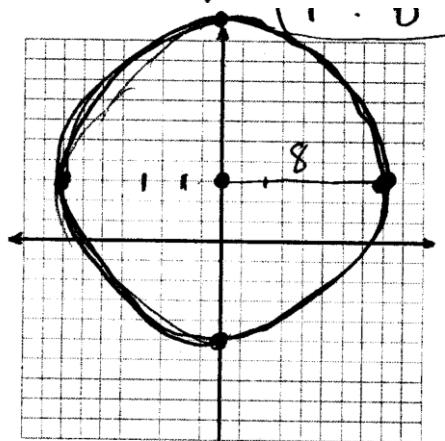
Radius: 3

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

9.



11.



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

