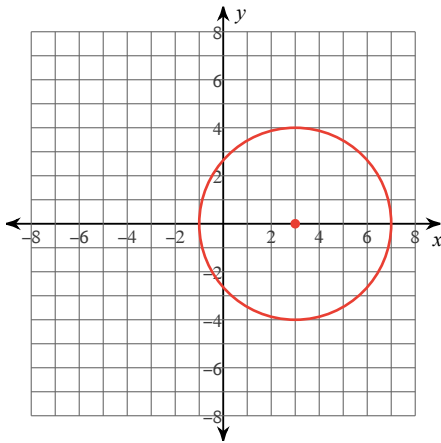


## Graphing Circles - PRACTICE

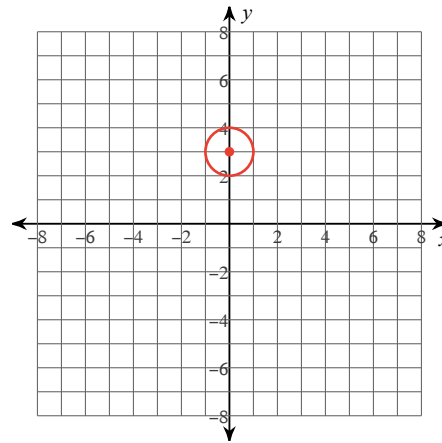
Identify the center and radius of each. Then sketch the graph.

1)  $(x - 3)^2 + y^2 = 16$



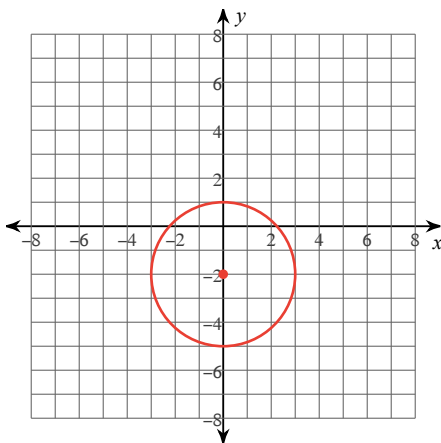
Center: (3, 0)  
Radius: 4

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



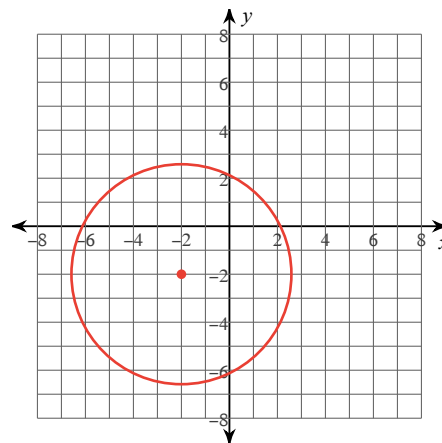
Center: (0, 3)  
Radius: 1

3)  $x^2 + (y + 2)^2 = 9$



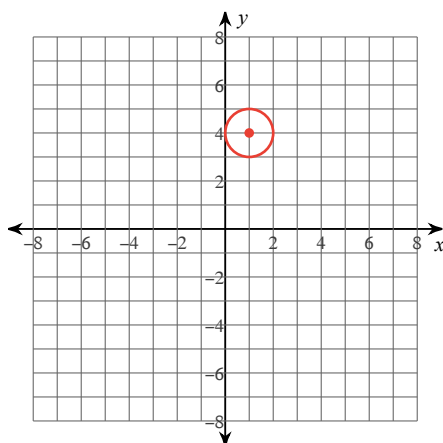
Center: (0, -2)  
Radius: 3

4)  $(x + 2)^2 + (y + 2)^2 = 21$



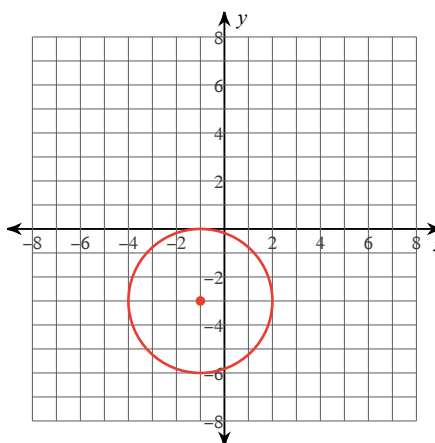
Center: (-2, -2)  
Radius:  $\sqrt{21}$

$$5) (x - 1)^2 + (y - 4)^2 = 1$$



Center: (1, 4)  
Radius: 1

$$6) (x + 1)^2 + (y + 3)^2 = 9$$



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

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

- 7) Center: (-13, -8)  
Radius: 2

$$(x + 13)^2 + (y + 8)^2 = 4$$

- 8) Center: (11, 3)  
Radius: 4

$$(x - 11)^2 + (y - 3)^2 = 16$$

- 9) Center: (2, 3)  
Radius: 7

$$(x - 2)^2 + (y - 3)^2 = 49$$

- 10) Center: (-8, -7)  
Radius: 8

$$(x + 8)^2 + (y + 7)^2 = 64$$

- 11) Center: (-2, 11)  
Radius: 6

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

- 12) Center: (15, -2)  
Radius: 3

$$(x - 15)^2 + (y + 2)^2 = 9$$

- 13) Center: (-8, -3)  
Radius: 6

$$(x + 8)^2 + (y + 3)^2 = 36$$

- 14) Center: (16, 10)  
Radius: 1

$$(x - 16)^2 + (y - 10)^2 = 1$$