

Name _____

Period _____

Equations of Circles

Identify the center and radius of the circle.

1. $(x - 3)^2 + (y - 4)^2 = 81$

Center: _____ Radius: _____

2. $(x + 7)^2 + (y - 10)^2 = 121$

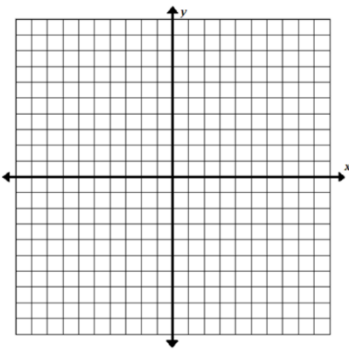
Center: _____ Radius: _____

3. $x^2 + y^2 = 100$

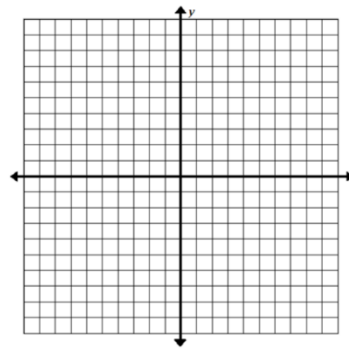
Center: _____ Radius: _____

Graph the circle.

4. $(x - 2)^2 + (y + 4)^2 = 16$

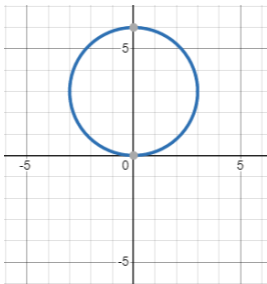


5. $x^2 + y^2 = 49$

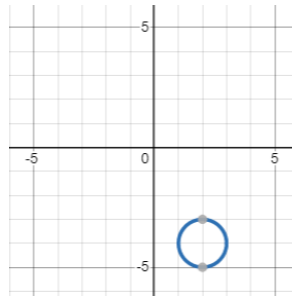


Write the equation of the circle.

6.



7.



8. Center: (5, 4) Radius: 6

9. Center: (8, -5) Radius: 2

10. Center: (-4, 8) Passes through the point: (-2, 3)

Equations of Circles – Answers

Identify the center and radius of the circle.

1. $(x - 3)^2 + (y - 4)^2 = 81$

Center: (3,4)

Radius: 9

2. $(x + 7)^2 + (y - 10)^2 = 121$

Center: (-7,10)

Radius: 11

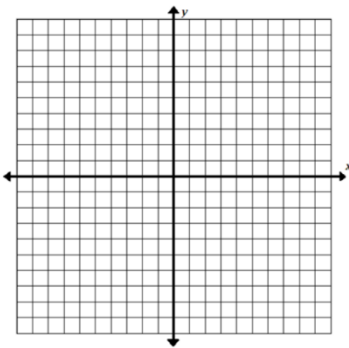
3. $x^2 + y^2 = 100$

Center: (0,0)

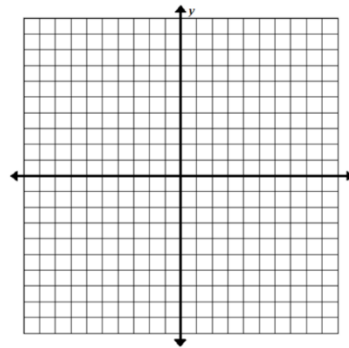
Radius: 10

Graph the circle.

4. $(x - 2)^2 + (y + 4)^2 = 16$

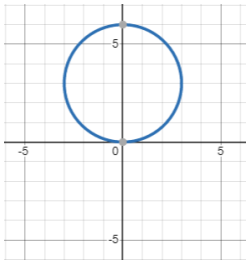


5. $x^2 + y^2 = 49$



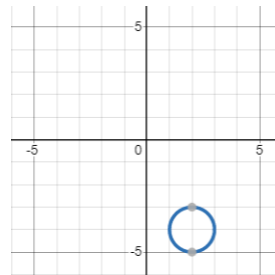
Write the equation of the circle.

6.



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

7.



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

8. Center: (5, 4) Radius: 6

$$(x - 5)^2 + (y - 4)^2 = 36$$

9. Center: (8, -5) Radius: 2

$$(x - 8)^2 + (y + 5)^2 = 4$$

10. Center: (-4, 8) Passes through the point: (-2, 3)

$$(x + 4)^2 + (y - 8)^2 = 29$$