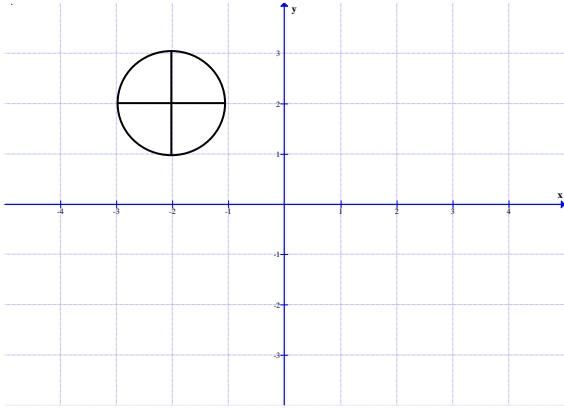Name: _____ Period: _____ Date: _____

Circles in the Coordinate Plane Assignment

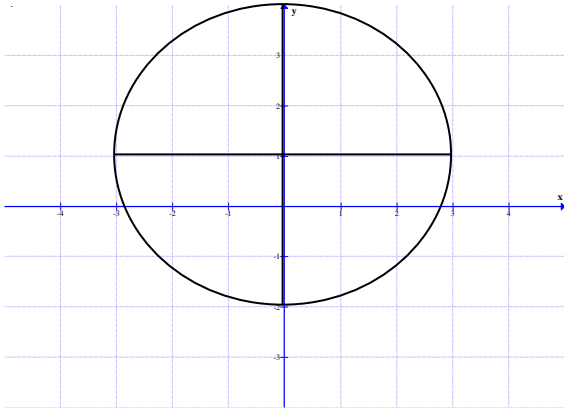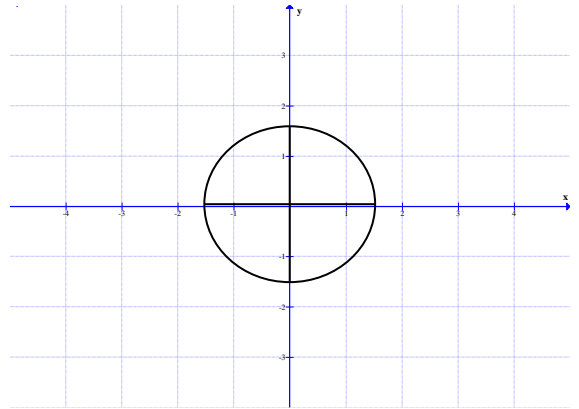**Find the center radius equation of the following circles.**

1.

2.

3.

4.

1

Circles in the Coordinate Plane Assignment

Find the center radius equation of a circle given its center and radius.

5. Center at (3,4) and radius is 5

6. Center at (0,0) and radius is 10

7. Center at (-3,-7) and radius is 5
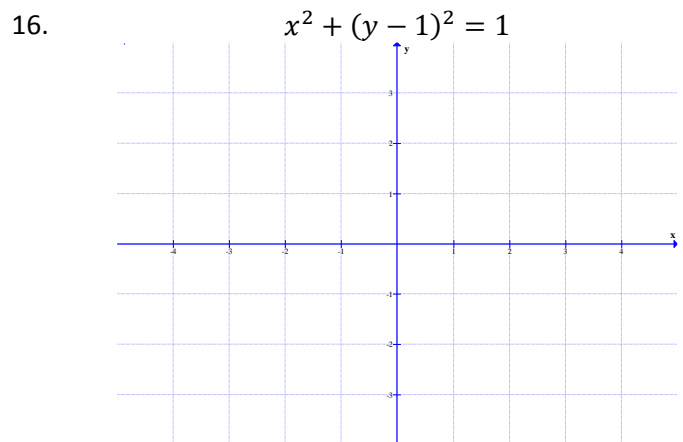
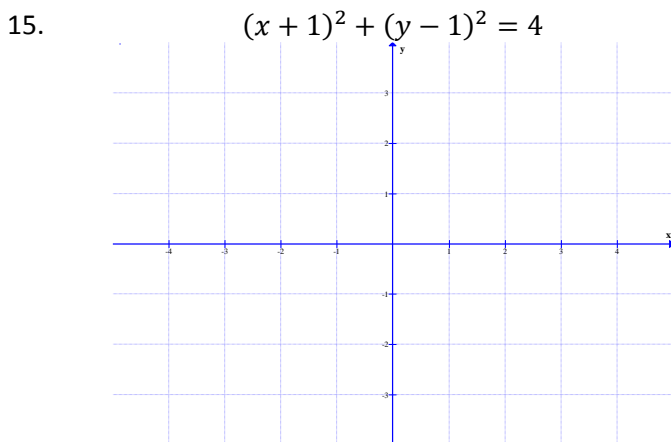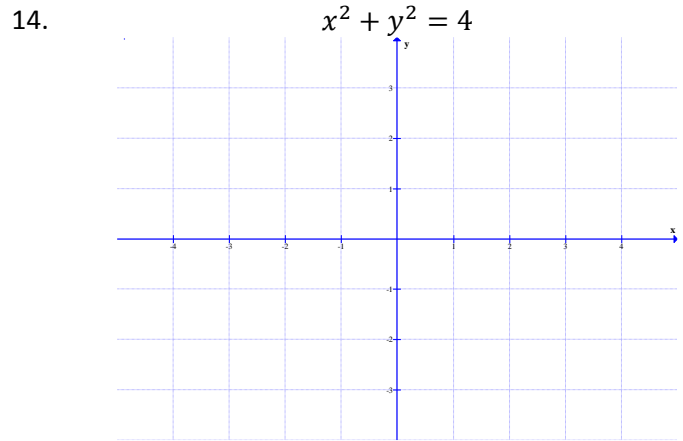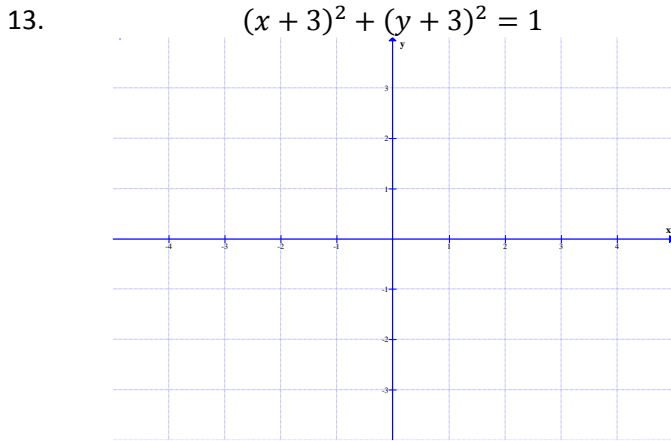8. Center at (4,0) and radius is 4

Find the radius of the following circle.

9. Center at (3,4) and point (3,8)

10. Center at (0,0) and point (3,3)

11. Center at (-3,-7) and point (-1, -7)

12. Center at (4,0) and point (4,5)

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Circles in the Coordinate Plane Assignment

Graph the following circle.

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

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

15.
$$(x + 1)^2 + (y - 1)^2 = 4$$

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

Change the following general formula to center radius form.

17. $x^2 + y^2 - 4x + 6y - 24 = 0$

18. $x^2 + y^2 + 10x - 8y - 12 = 0$

19. $x^2 + y^2 - 6x + 4y - 10 = 0$

20. $x^2 + y^2 - 2x + 4y + 10 = 0$

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Circles in the Coordinate Plane Assignment