Practice Quiz 1 – Finding Equation of Circles

Write the center and radius of the circle

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

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

3. $x^2 + x^2 = 49$

4. $(x - 7)^2 + (y + 2)^2 = 4$

Write the standard equation of the circle with the given center and radius.

5.   The center is (2, 5) and the radius is 9
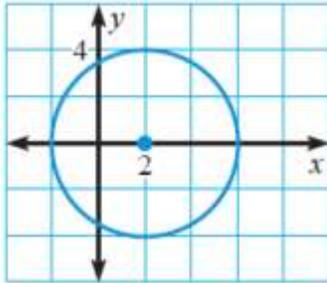
6.   The center is (-4, -1) and the radius is 4

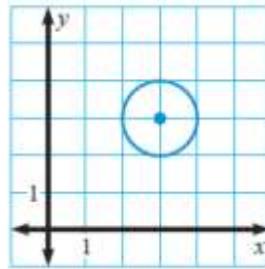7.   The center is (-6, 0) and the radius is $\sqrt{10}$

8.   The center is (-2, 1) and the radius is 2.5

Given the following graphs, write the standard equation of the circle.

9.

10.

Use the given information to write the standard equation of the circle. Show all work on your own paper.

11.   The point (5, 2) is on the circle whose center is (3, 2)

12.   The point (3, 3) is on the circle whose center is (3, -1)

State the equation of a circle in general form given the following. Show all work on your own paper.

13.   The center is (-2, -2) and the radius is 5

14.   The center is (4, 5) and the radius is 6

Convert the following equation into standard form and graph

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

16. $x^2 + y^2 - 14x + 4y + 49 = 0$