Name _____ Class _____ Date _____

Practice 12-1

Mixed Exercises

Find the center and radius of each circle.

1. $x^2 + y^2 = 25$

2. $(x - 3)^2 + (y - 5)^2 = 9$

3. $(x + 1)^2 + (y + 6)^2 = 16$

4. $(x + 3)^2 + (y - 11)^2 = 12$

Write the standard equation of the circle.

5. center $(0, 0)$; $r = 7$

6. center $(4, 3)$; $r = 8$

7. center $(5, 3)$; $r = 2$

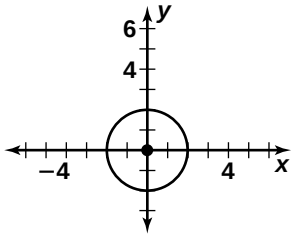
8. center $(-5, 4)$; $r = \frac{1}{2}$

9. center $(-2, -5)$; $r = \sqrt{2}$

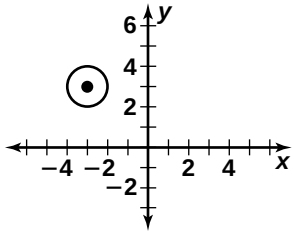
10. center $(-1, 6)$; $r = \sqrt{5}$

Write an equation of each circle

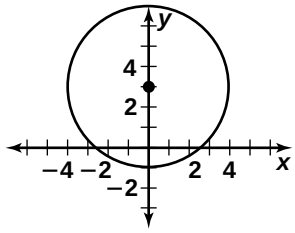
11.



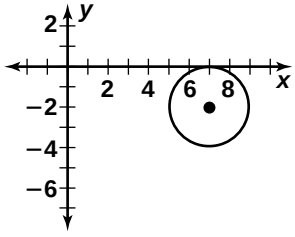
12.



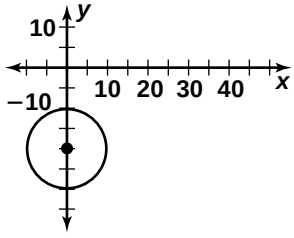
13.



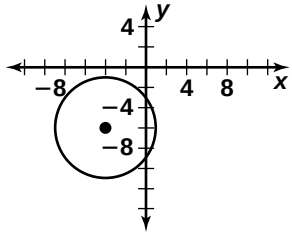
14.



15.



16.



Graph each circle. Label its center and state its radius.

17. $x^2 + y^2 = 25$

18. $(x - 3)^2 + (y - 5)^2 = 9$

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

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

Write the equation of the circle with the given center passing through the given point.

21. center $(0, 0)$; through $(3, 4)$

22. center $(5, 9)$; through $(2, 9)$

23. center $(-4, -3)$; through $(2, 2)$

24. center $(7, -2)$; through $(-1, -6)$