NAME _____ DATE _____

Practice B

For use with pages 636–640

Match the equation of a circle with its description.

1. $(x + 2)^2 + (y + 3)^2 = 4$ A. center $(-3, 5)$, radius 4

2. $(x - 2)^2 + (y + 5)^2 = 9$ B. center $(-2, -3)$, radius 3

3. $(x + 3)^2 + (y - 5)^2 = 16$ C. center $(-2, -3)$, radius 2

4. $(x + 2)^2 + (y + 3)^2 = 9$ D. center $(2, 5)$, radius 3

5. $(x + 3)^2 + (y - 5)^2 = 16$ E. center $(-3, 5)$, radius 4

6. $(x - 2)^2 + (y - 5)^2 = 9$ F. center $(2, -5)$, radius 3

Give the center and radius of the circle.

7. $(x - 4)^2 + (y + 2)^2 = 25$ 8. $(x + 2)^2 + (y + 4)^2 = 9$

9. $(x - 5)^2 + (y - 3)^2 = 16$ 10. $(x + 6)^2 + (y - 4)^2 = 4$

11. $(x - 5)^2 + (y - 6)^2 = 36$ 12. $(x + 3)^2 + (y - 4)^2 = 16$

Give the coordinates of the center, the radius, and the equation of the circle.

13.

14.

15.
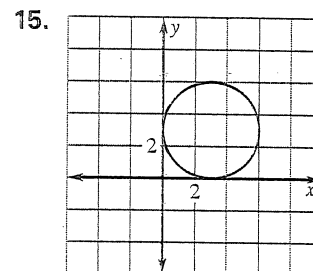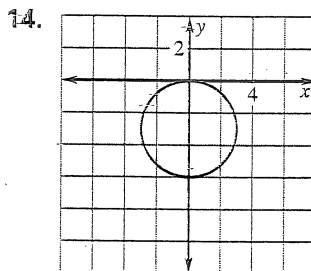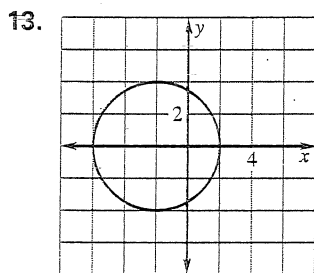
Write the standard equation of the circle with the given center and radius.

16. center $(0, 0)$, radius 1   17. center $(0, 4)$, radius 4

18. center $(-4, 2)$, radius 3   19. center $(-3, -5)$, radius 5

The equation of a circle is $(x - 4)^2 + (y - 2)^2 = 9$. Tell whether each point is *on* the circle, in the *interior* of the circle, or in the *exterior* of the circle.

20. $(5, 1)$ 21. $(8, 2)$ 22. $(1, 2)$

23. $(4, 5)$ 24. $(0, 2)$ 25. $(4, -2)$