

LESSON
9.3

Practice A

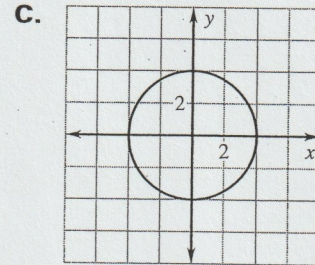
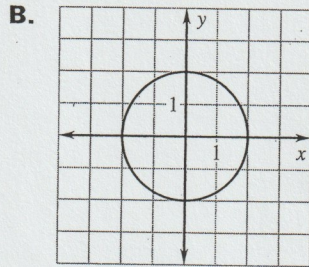
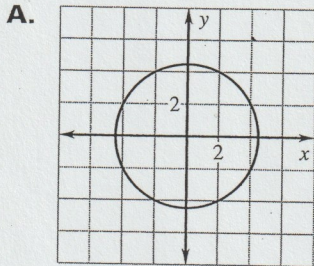
For use with pages 626–633

Match the equation with its graph.

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

2. $x^2 + y^2 = 16$

3. $x^2 + y^2 = 20$

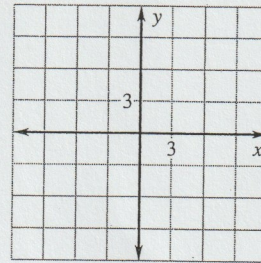
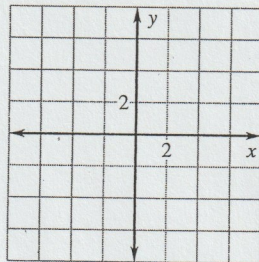
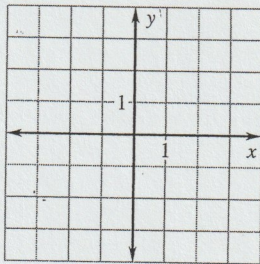


Graph the equation. Identify the radius of the circle.

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

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

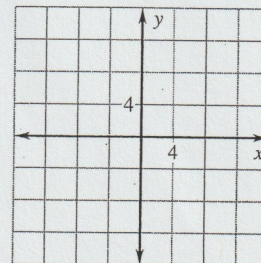
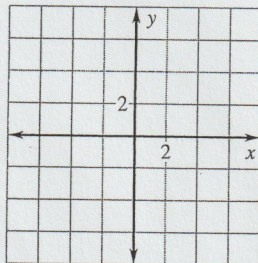
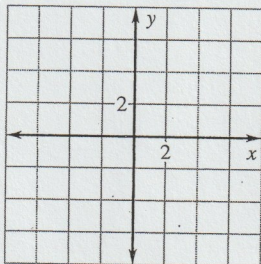
6. $x^2 + y^2 = 81$



7. $x^2 + y^2 = 12$

8. $x^2 + y^2 = 30$

9. $x^2 + y^2 = 110$



Write the standard form of the equation of the circle with the given radius and whose center is the origin.

10. 3

11. 6

12. $\sqrt{10}$

Write the standard form of the equation of the circle that passes through the given point and whose center is the origin.

13. (1, 0)

14. (2, 2)

15. (3, -2)

Write an equation of the line tangent to the given circle at the given point.

16. $x^2 + y^2 = 13$; (2, 3)

17. $x^2 + y^2 = 20$; (-4, 2)

18. **Radio** A radio station has a broadcast radius of 40 miles. Your house is located 32 miles west and 21 miles south of the radio station. Is your house within the broadcast range?