Name _____ **Date** _____

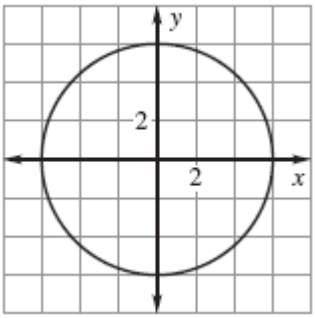
LESSON 10.7

Practice B

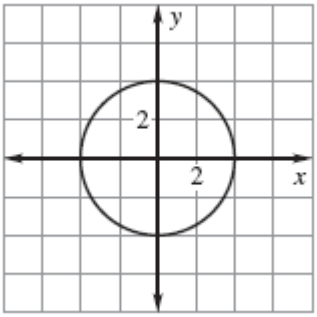
For use with pages 699–705

Write the standard equation of the circle.

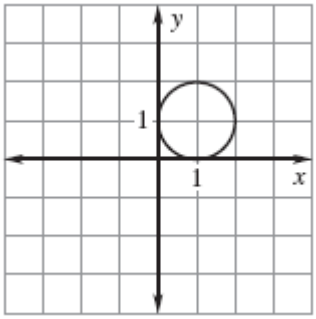
1.



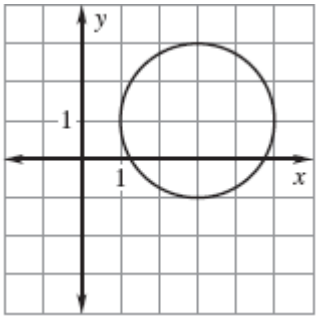
2.



3.



4.



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

5. Center (0, 0), radius 9

6. Center (1, 3), radius 4

7. Center (0, 14), radius 14

8. Center (–12, 7), radius 6

Use the given information to write the standard equation of the circle.

9. The center is (0, 0), and a point on the circle is (4, 0).

10. The center is (0, 0), and a point on the circle is (3, –4).

11. The center is (–43, 5), and a point on the circle is (–34, 17).

12. The center is (17, 24), and a point on the circle is (–3, 9).

Determine the diameter of the circle with the given equation.

13. $x^2 + y^2 = 100$

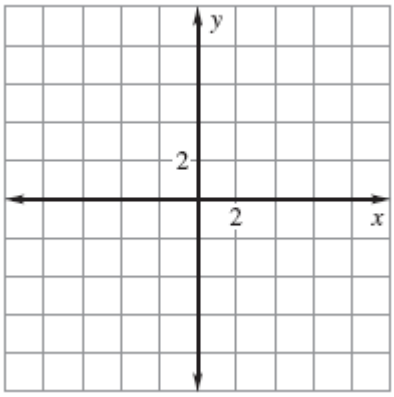
14. $(x - 12)^2 + (y + 5)^2 = 64$

15. $(x - 2)^2 + (y - 9)^2 = 4$

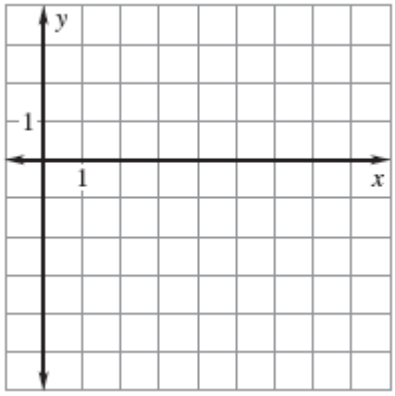
16. $(x + 16)^2 + (y + 15)^2 = 81$

Graph the equation.

17. $x^2 + y^2 = 64$



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



Determine whether the point lies on the circle described by the equation $(x - 3)^2 + (y - 8)^2 = 100$.

19. (0, 0)

20. (13, 8)

21. (–5, 2)

22. (11, 5)