

**Practice B**

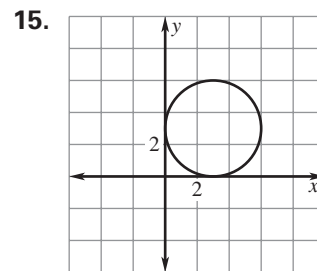
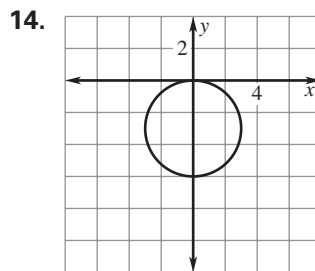
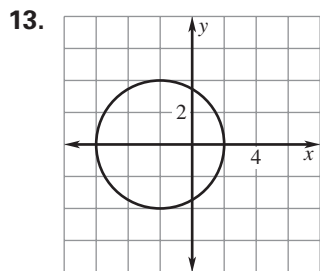
For use with pages 636–640

**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.****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. $(4, -2)$ |