

Practice 12-1

Example Exercises

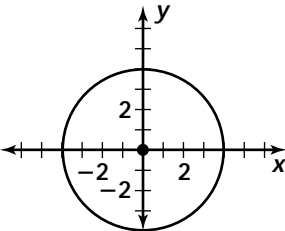
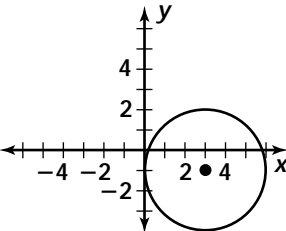
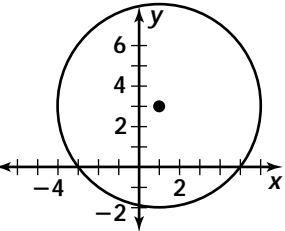
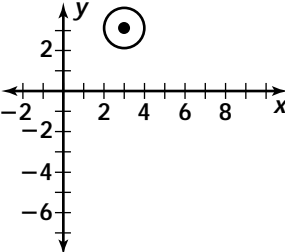
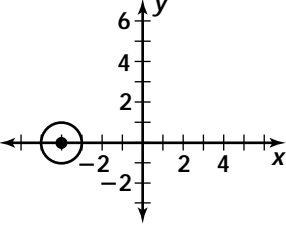
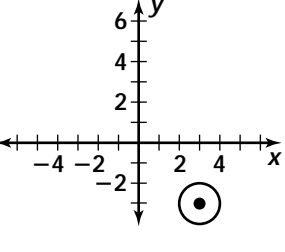
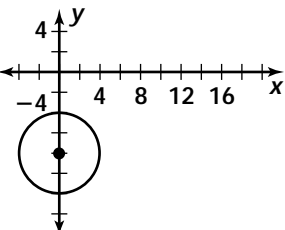
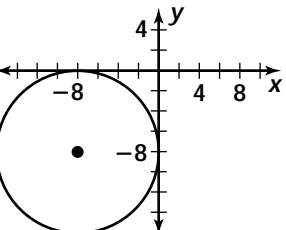
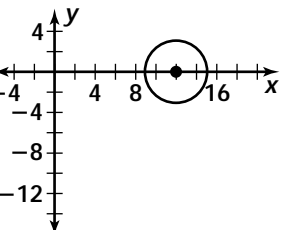
Example 1

Write the standard equation of the circle.

- | | | |
|---|---------------------------------------|--------------------------------------|
| 1. center $(0, 0)$; $r = 3$ | 2. center $(4, 5)$; $r = 2$ | 3. center $(1, 8)$; $r = 9$ |
| 4. center $(-2, 5)$; $r = \frac{1}{2}$ | 5. center $(-4, -6)$; $r = \sqrt{5}$ | 6. center $(6, -3)$; $r = \sqrt{7}$ |

Example 2

Write an equation of each circle.

- | | | |
|---|---|---|
| 7.  | 8.  | 9.  |
| 10.  | 11.  | 12.  |
| 13.  | 14.  | 15.  |

Example 3

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

- | | |
|--|--|
| 16. center $(0, 0)$; through $(3, 0)$ | 17. center $(2, 3)$; through $(5, 7)$ |
| 18. center $(-3, 5)$; through $(3, -3)$ | 19. center $(-6, -5)$; through $(1, 1)$ |
| 20. center $(2, -5)$; through $(3, 3)$ | 21. center $(4, -9)$ through $(-5, -6)$ |