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1. A circle has the equation $x^2 + y^2 = 16$. What is the radius of the circle?

    A. 4

    B. 16

    C. 32

    D. 256

2. A circle has the equation $(x + 5)^2 + (y - 2)^2 = 9$. What is the center of the circle?

    F. $(5, -2)$

    G. $(-5, 2)$

    H. $(2, -5)$

    I. $(-2, 5)$

3. A circle has the equation $(x - 3)^2 + (y + 5)^2 = 36$. Which of the following statements is NOT true?

    A. The *x*-coordinate of the center is 3.

    B. The *y*-coordinate of the center is 5.

    C. The radius of the circle is 6.

    D. The point (3, 1) lies on the circle.

4. What is the equation of a circle with center (2, 4) and radius 5?

    F. $(x - 2)^2 + (y - 4)^2 = 5$

    G. $(x + 2)^2 + (y + 4)^2 = 5$

    H. $(x - 2)^2 + (y - 4)^2 = 25$

    I. $(x + 2)^2 + (y + 4)^2 = 25$

5. *C* is the center of the circle shown below.
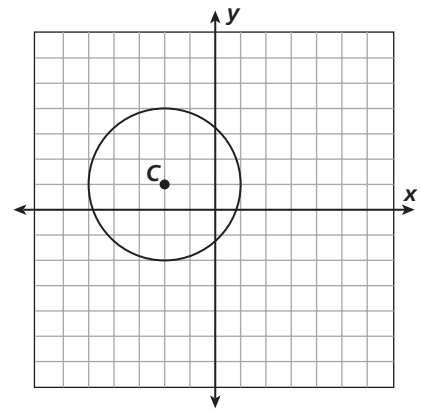
What is the equation of circle *C*?

    A. $(x - 2)^2 + (y + 1)^2 = 3$

    B. $(x + 2)^2 + (y - 1)^2 = 3$

    C. $(x - 2)^2 + (y + 1)^2 = 9$

    D. $(x + 2)^2 + (y - 1)^2 = 9$

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6. Which point lies on the circle whose equation is $(x - 3)^2 + (y + 3)^2 = 45$?

F. (0, 3)

G. (1, 3)

H. (2, 3)

I. (3, 3)

7. The center of a circle is at $(-5, 0)$, and the diameter of the circle is 18. Which of the following is the equation of the circle?

A. $(x - 5)^2 + y^2 = 9$

B. $(x - 5)^2 + y^2 = 81$

C. $(x + 5)^2 + y^2 = 9$

D. $(x + 5)^2 + y^2 = 81$

8. The center of a circle is at $(6, -7)$ and the diameter of the circle is 22. Which of the following is the equation of the circle?

F. $(x - 6)^2 + (y + 7)^2 = 11$

G. $(x + 6)^2 + (y - 7)^2 = 11$

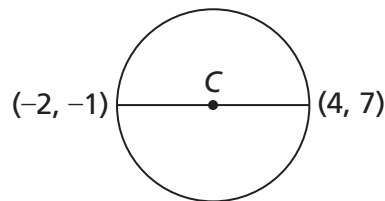H. $(x + 6)^2 + (y - 7)^2 = 121$

I. $(x - 6)^2 + (y + 7)^2 = 121$

9. What is the circumference of a circle whose equation is $2x^2 + 2y^2 = 8$? (Use 3.14 for π.)

A. 12.56 units

B. 25.12 units

C. 50.24 units

D. 100.48 units

10. Which is the equation of a circle whose center is at the origin and that passes through the point (3, 5)?

F. $(x - 3)^2 + (y - 5)^2 = 34$

G. $(x - 3)^2 + (y - 5)^2 = 64$

H. $x^2 + y^2 = 34$

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

11. *C* is the center of the circle shown below.

What is the equation of circle *C*?

A. $(x - 1)^2 + (y - 3)^2 = 100$

B. $(x + 1)^2 + (y + 3)^2 = 100$

C. $(x - 1)^2 + (y - 3)^2 = 25$

D. $(x + 1)^2 + (y + 3)^2 = 25$

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