

NAME: _____

1. Find the center and radius of the circle.

$$(x-9)^2 + (y-7)^2 = 16$$

[A] $(-9, -7); 4$ [B] $(7, -9); 4$ [C] $(7, 9); 16$ [D] $(9, 7); 4$

2. Find the center and radius of the circle.

$$(x-3)^2 + (y+8)^2 = 64$$

[A] $(-8, -3); 8$ [B] $(3, -8); 8$ [C] $(-8, 3); 64$ [D] $(-3, 8); 8$

3. Find the center and radius of the circle.

$$(x+6)^2 + (y-6)^2 = 25$$

[A] $(6, 6); 5$ [B] $(-6, 6); 5$ [C] $(6, -6); 5$ [D] $(6, -6); 25$

4. Find the center and radius of the circle.

$$(x-4)^2 + (y-9)^2 = 64$$

[A] $(-4, -9); 8$ [B] $(9, 4); 64$ [C] $(4, 9); 8$ [D] $(9, -4); 8$

5. Find the center and radius of the circle.

$$(x-3)^2 + (y+5)^2 = 9$$

[A] $(3, -5); 3$ [B] $(-3, 5); 3$ [C] $(-5, 3); 9$ [D] $(-5, -3); 3$

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6. Find the center and radius of the circle.

$$(x+6)^2 + (y+4)^2 = 64$$

- [A] (6, 4); 8 [B] (-4, 6); 8 [C] (-6, -4); 8 [D] (-4, -6); 64

7. Which is the center of the circle $(x+2)^2 + (y-1)^2 = 9$?

- [A] (2, 1) [B] (-2, -1) [C] (-2, 1) [D] (2, -1)

8. The plans of a landscape artist include a circular fountain in a public park. The outline of the fountain can be modeled by $(x-4)^2 + (y-5)^2 = 60$ where the units are meters and the graph is on a grid map of the park. Find the map location in coordinates of the center. Then find the circumference of the fountain.

9. Here are four equations for four concentric circles:

$$x^2 + y^2 = 4; \quad x^2 + y^2 = 16; \quad x^2 + y^2 = 36; \quad x^2 + y^2 = 64.$$

Find the mean of the radii of these circles.

10. Compare the quantity in Column A with the quantity in Column B

Column A

Column B

the radius of $x^2 + y^2 = 100$

the radius of $(x+3)^2 + (y-2)^2 = 100$

- [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined on the basis of the information supplied.

[1] D

[2] B

[3] B

[4] C

[5] A

[6] C

[7] C

[8] (4, 5); 48.67 m to the nearest hundredth

[9] 5

[10] C