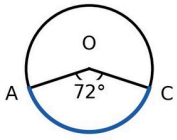
ARIZONA GEOMETRY · UNIT 2 · 25 QUESTIONS

Circles and Coordinate Geometry — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A central angle measures 72°. Its intercepted arc measures**



Question 1

A central angle measures 72°. Its intercepted arc measures

A) 72°

B) 144°

C) 36°

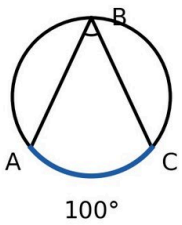
D) 288°

- **A** 72°
- **B** 144°
- **C** 36°
- **D** 288°

Understand It with Pulse

Flag a mistake

2 An inscribed angle intercepts an arc of 100°. The angle measures



Question 2

An inscribed angle intercepts an arc of 100°. The angle measures

A) 25°

B) 100°

C) 50°

D) 200°

A 25°

B 100°

C 50°

D 200°

Understand It with Pulse

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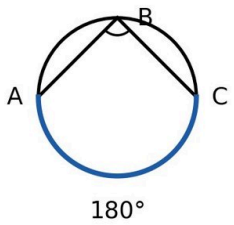
3 An angle inscribed in a semicircle measures



Question 3

An angle inscribed in a semicircle measures

A) 180°

B) 60°

C) 45°

D) 90°

A 180°

B 60°

C 45°

D 90°

Understand It with Pulse

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4 **A circle has radius 9 and a central angle of 120°. The arc length is**

A 9π

B 6π

C 3π

D 12π

Understand It with Pulse | Flag a mistake

5 **A sector has radius 6 and a central angle of 90°. The sector area is**



A 36π

B 6π

C 18π

D 9π

Understand It with Pulse | Flag a mistake

6

A circle has radius 7. Its circumference is

A 14π

B 49π

C 21π

D 7π

Understand It with Pulse

Flag a mistake

7 **A circle has radius 5. Its area is**



A 5π

B 50π

C 25π

D 10π

Understand It with Pulse | Flag a mistake

8 **A chord is 5 units from the center of a circle of radius 13. The chord length is**

A 12

B 10

C 26

D 24

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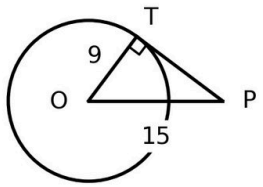
9 **A point outside a circle is 15 units from the center. The radius is 9. The tangent segment length is**



Question 9

A point outside a circle is 15 units from the center. The radius is 9. The tangent segment length is

A) 24

B) 6

C) 12

D) 18

- **A** 24
- **B** 6
- **C** 12
- **D** 18

Understand It with Pulse | Flag a mistake

10 **A circle has center (2, -3) and radius 4. Its equation is**

- **A** $(x + 2)^2 + (y - 3)^2 = 16$
- **B** $(x - 2)^2 + (y + 3)^2 = 4$
- **C** $(x - 2)^2 + (y + 3)^2 = 16$
- **D** $(x - 2)^2 + (y - 3)^2 = 16$

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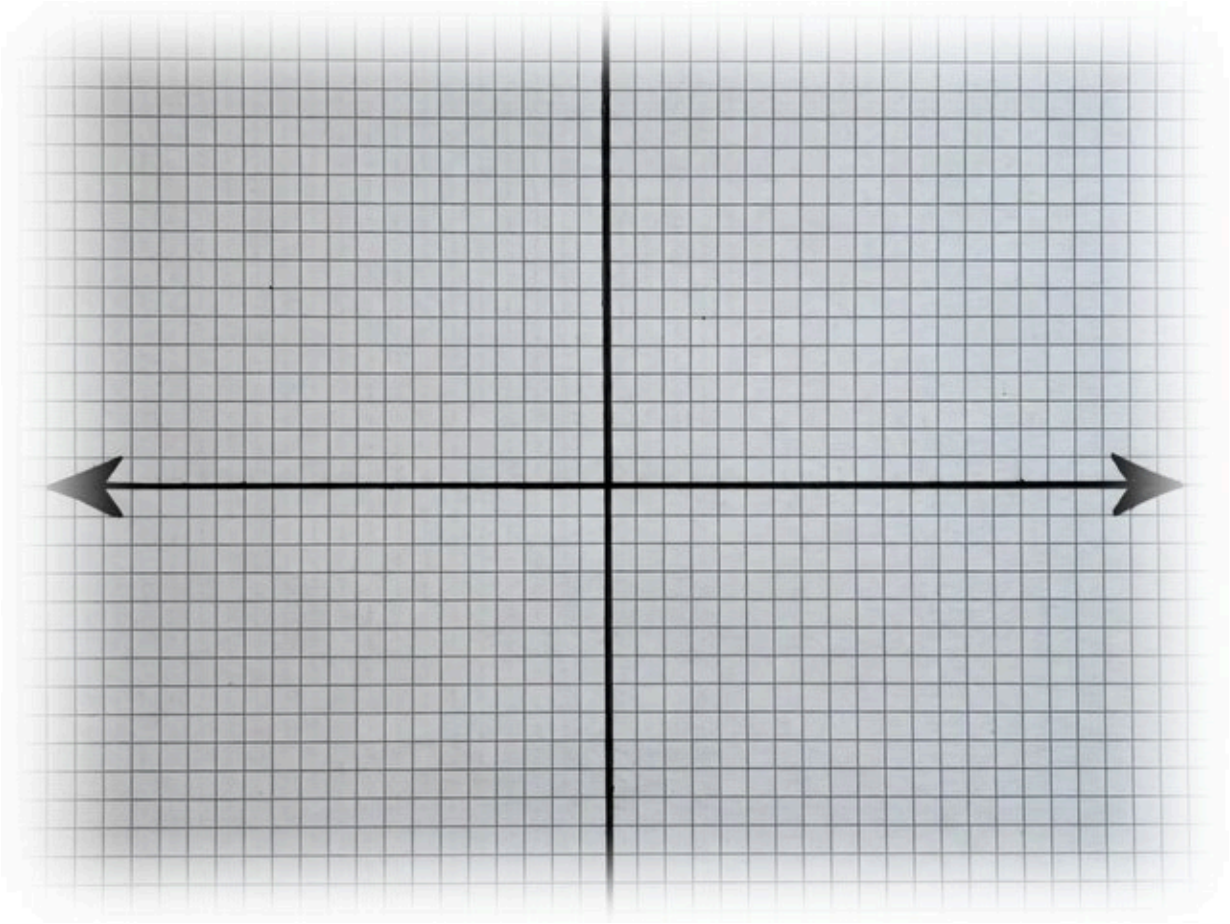
11 The circle $(x + 1)^2 + (y - 4)^2 = 25$ has center



A (-1, -4)

B (1, -4)

C (1, 4)

D (-1, 4)

Understand It with Pulse | Flag a mistake

12 **The circle $(x + 1)^2 + (y - 4)^2 = 25$ has radius**

A 12.5

B 25

C 5

D 10

Understand It with Pulse | Flag a mistake

13 The distance between (0, 0) and (6, 8) is



A 14

B 100

C 48

D 10

Understand It with Pulse | Flag a mistake

14 **The midpoint of (2, 4) and (10, 10) is**

A (4, 3)

B (6, 7)

C (12, 14)

D (6, 6)

Understand It with Pulse | Flag a mistake

15 **A line has slope 2. A line perpendicular to it has slope**



A 2

B -2

C $-\frac{1}{2}$

D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

16 **The point (3, 4) is how far from the origin**

A 5

B 25

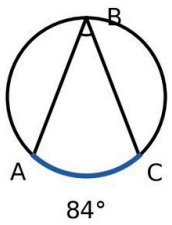
C 7

D 12

Understand It with Pulse | Flag a mistake

17

An inscribed angle intercepts an arc of 84°. The angle measures



Question 17

An inscribed angle intercepts an arc of 84°. The angle measures

A) 42°

B) 168°

C) 84°

D) 21°

A 42°

B 168°

C 84°

D 21°

Understand It with Pulse

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18 **Two chords intersect inside a circle, intercepting arcs of 80° and 60°. The angle between the chords measures**

- A 140°
- B 40°
- C 20°
- D 70°

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19 **Two secants meet outside a circle, intercepting arcs of 120° and 40°. The angle at the meeting point measures**

- A 160°
- B 60°
- C 40°
- D 80°

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20 **A circle centered at the origin has radius 10. Its equation is**

- **A** $x^2 + y^2 = 10$
- **B** $x + y = 100$
- **C** $x^2 + y^2 = 20$
- **D** $x^2 + y^2 = 100$

Understand It with Pulse | Flag a mistake

21 **A circle has diameter 18. Its circumference is**



A 9π

B 18π

C 81π

D 36π

Understand It with Pulse | Flag a mistake

22 **A sector has radius 10 and a central angle of 36°. The sector area is**

- A 100π
- B 36π
- C 10π
- D 5π

Understand It with Pulse | Flag a mistake

23 **Two tangent segments from the same outside point are equal One measures 14. The other measures ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

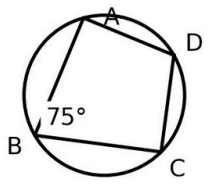
24 **A circle has circumference 20π. Its radius is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25

In a quadrilateral inscribed in a circle, one angle measures 75°. The opposite angle measures



Question 25

In a quadrilateral inscribed in a circle, one angle measures

75°. The opposite angle measures

A) 15°

B) 105°

C) 75°

D) 180°

A 15°

B 105°

C 75°

D 180°

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Flag a mistake

ANSWER KEY

1. A
2. C
3. D
4. B
5. D
6. A
7. C
8. D
9. C
10. C
11. D
12. C
13. D
14. B
15. C
16. A
17. A
18. D
19. C
20. D
21. B
22. C
23. 14
24. 10
25. B

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