CALIFORNIA GEOMETRY · UNIT 3 · 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 circle has radius 5. Its circumference is**

- **A** 20π
- **B** 5π
- **C** 25π
- **D** 10π

Understand It with Pulse | Flag a mistake

2 **A circle has radius 6. Its area is**

- A 18π
- B 12π
- C 36π
- D 72π

Understand It with Pulse | Flag a mistake

3 **A central angle measures 80°. Its intercepted arc measures**

- A 100°
- B 160°
- C 80°
- D 40°

Understand It with Pulse | Flag a mistake

4 An inscribed angle measures 35°. Its intercepted arc measures

- A 70°
- B 35°
- C 105°
- D 17°

Understand It with Pulse | Flag a mistake

5 An angle inscribed in a semicircle measures

- A 60°
- B 180°
- C 45°
- D 90°

Understand It with Pulse | Flag a mistake

6 **A sector has radius 4 and central angle 90°. Its area is**

- A 8π
- B 4π
- C 2π
- D 16π

Understand It with Pulse | Flag a mistake

7 **An arc has radius 9 and central angle 40°. Its length is**

- A π
- B 2π
- C 9π
- D 4π

Understand It with Pulse | Flag a mistake

8 **A tangent to a circle is perpendicular to the radius at the**

- A Point of tangency
- B Center
- C Diameter end
- D Chord midpoint only

Understand It with Pulse | Flag a mistake

9 **Two tangent segments from the same exterior point to a circle are**

- A Supplementary
- B Parallel
- C Perpendicular
- D Congruent

Understand It with Pulse | Flag a mistake

10 **In a circle a radius perpendicular to a chord**

- A Removes the chord
- B Doubles the chord
- C Is parallel to it
- D Bisects the chord

Understand It with Pulse | Flag a mistake

11 **The distance between (0, 0) and (6, 8) is**

- A 10
- B 14
- C 48
- D 7

Understand It with Pulse | Flag a mistake

12 The midpoint of (2, 4) and (8, 10) is

- A (5, 7)
- B (5, 3)
- C (3, 3)
- D (10, 14)

Understand It with Pulse | Flag a mistake

13 The slope of the line through (1, 2) and (5, 10) is

- A -2
- B 2
- C 8
- D $\frac{1}{2}$

Understand It with Pulse | Flag a mistake

14 **A line parallel to a line of slope 3 has slope**

- **A** $\frac{1}{3}$
- **B** $-\frac{1}{3}$
- **C** -3
- **D** 3

Understand It with Pulse | Flag a mistake

15 **A line perpendicular to a line of slope 4 has slope**

- **A** 4
- **B** -4
- **C** $-\frac{1}{4}$
- **D** $\frac{1}{4}$

Understand It with Pulse | Flag a mistake

16 **The circle $(x - 3)^2 + (y + 2)^2 = 25$ has center**

A (-3, -2)

B (3, -2)

C (3, 2)

D (-3, 2)

Understand It with Pulse | Flag a mistake

17 **The circle $(x - 3)^2 + (y + 2)^2 = 25$ has radius**

A 3

B 25

C 5

D 10

Understand It with Pulse | Flag a mistake

18 **A circle centered at (0, 0) with radius 7 has equation**

- **A** $x^2 + y^2 = 49$
- **B** $x^2 + y^2 = 14$
- **C** $(x - 7)^2 + y^2 = 49$
- **D** $x^2 + y^2 = 7$

Understand It with Pulse | Flag a mistake

19 **The equation of a line with slope 2 through (0, -5) is**

- **A** $y = 2x + 5$
- **B** $y = -5x + 2$
- **C** $y = 2x - 5$
- **D** $y = \frac{1}{2}x - 5$

Understand It with Pulse | Flag a mistake

20 **Two chords intersect inside a circle with segments 3, 8, 4, and x. The value of x is**

- A 5
- B 12
- C 9
- D 6

Understand It with Pulse | Flag a mistake

21 **A secant and tangent meet outside a circle. The tangent length is 6 and the external secant segment is 4. The whole secant length is**

- A 24
- B 3
- C 9
- D 10

Understand It with Pulse | Flag a mistake

22 **Opposite angles of a quadrilateral inscribed in a circle are**

- A Supplementary
- B Complementary
- C Right always
- D Congruent

Understand It with Pulse | Flag a mistake

23 **The point (3, 4) lies on a circle centered at the origin with radius**

- A 5
- B 25
- C 7
- D 12

Understand It with Pulse | Flag a mistake

24 **A circle has diameter 14. Its radius is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The distance between (3, 1) and (3, 9) is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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