ALASKA 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 intercepts an arc of 140°. The central angle measures**

- A 70°
- B 140°
- C 280°
- D 35°

Understand It with Pulse | Flag a mistake

2 **An inscribed angle intercepts an arc of 110°. The inscribed angle measures**

- A 110°
- B 220°
- C 27.5°
- D 55°

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3 **An angle inscribed in a semicircle measures**

- A 45°
- B 180°
- C 90°
- D 60°

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4 **In a quadrilateral inscribed in a circle, one angle measures 108°. The opposite angle measures**

A 108°

B 72°

C 180°

D 90°

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5 **A radius drawn to a point of tangency makes an angle with the tangent of**

A 45°

B 180°

C 60°

D 90°

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6 **Two tangent segments are drawn to a circle from the same outside point. One tangent segment has length 11. The other tangent segment has length**

- A 22
- B 5.5
- C 11
- D 121

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7 **Two chords intersect inside a circle. The segments of one chord are 5 and 6, and one segment of the other chord is 10. The other segment is**

- A 3
- B 30
- C 15
- D 2

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8 **A tangent segment and a secant meet outside a circle. The secant has an outside segment of 5 and a whole length of 20. The tangent segment has length**

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

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9 **Two secants meet outside a circle. One has an outside segment of 3 and a whole length of 12. The other has an outside segment of 4. The whole length of the second secant is**

- A 9
- B 12
- C 16
- D 6

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10 **A circle has radius 7. Its circumference, to one decimal place, is about**

- A 44.0
- B 22.0
- C 153.9
- D 14.0

Understand It with Pulse | Flag a mistake

11 **A circle has radius 7. Its area, to one decimal place, is about**

- A 44.0
- B 307.9
- C 49.0
- D 153.9

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12 **A circle has radius 8. An arc with central angle 90° has length, to one decimal place, about**

- A 50.3
- B 12.6
- C 25.1
- D 6.3

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13 **A circle has radius 8. A sector with central angle 90° has area, to one decimal place, about**

- A 50.3
- B 12.6
- C 201.1
- D 25.1

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14 The equation of the circle with center (-3, 2) and radius 4 is

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

Understand It with Pulse | Flag a mistake

15 The circle $(x - 5)^2 + (y + 1)^2 = 49$ has radius

- A 49
- B 7
- C 14
- D 3.5

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16 **The distance between (1, 2) and (4, 6) is**

A 7

B 25

C 5

D 3

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17 **The midpoint of the segment joining (0, 4) and (6, 10) is**

A (3, 7)

B (6, 14)

C (3, 3)

D (-3, -3)

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18 **The slope of the line through (-2, 3) and (2, 7) is**



A 2

B 0.5

C 1

D 4

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19 A line parallel to $y = -3x + 1$ has slope

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

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20 A line perpendicular to a line of slope -4 has slope

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

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21 The center of a circle with diameter endpoints (-1, 5) and (7, 1) is

- A (6, 4)
- B (8, 6)
- C (-4, 2)
- D (3, 3)

Understand It with Pulse | Flag a mistake

22 An angle formed by a tangent and a chord intercepts an arc of 140°. The angle measures

- A 140°
- B 35°
- C 70°
- D 280°

Understand It with Pulse | Flag a mistake

23 **A circle has radius 6. An arc with central angle 60° has length, to one decimal place, about ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A circle has radius 10. A sector with central angle 72° has area, to one decimal place, about ____**



ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The distance between (-3, 2) and (5, -4) is ____**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. D
3. C
4. B
5. D
6. C
7. A
8. C
9. A
10. A
11. D
12. B
13. A
14. B
15. B
16. C
17. A
18. C
19. C
20. B
21. D
22. C
23. 6.3
24. 62.8
25. 10

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