Circles and Coordinate Geometry - Practice Test | North Carolina Geometry

Practice Test

Unit 2: Circles and Coordinate Geometry

10 Questions

Original practice test based on the North Carolina curriculum. Work through each question, then check your answers at the end.

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.

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Question 1

A circle has diameter 10. Its circumference, to one decimal place, is about

A) 31.4

B) 62.8

C) 78.5

D) 15.7

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Question 2

A circle has radius 3. Its area, to one decimal place, is about

A) 18.8

B) 28.3

C) 9.4

D) 56.5

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Question 3

A circle has radius 12. An arc with central angle 30° has length, to one decimal place, about

A) 75.4

B) 12.6

C) 6.3

D) 37.7

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Question 4

A circle has radius 8. A sector with central angle 45° has area, to one decimal place, about

A) 50.3

B) 25.1

C) 12.6

D) 100.5

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Question 5

The equation of the circle with center $(-4,\ 1)$ and radius 3 is

A) $(x - 4)^2 + (y + 1)^2 = 9$

B) $(x + 4)^2 + (y + 1)^2 = 3$

C) $(x - 4)^2 + (y - 1)^2 = 3$

D) $(x + 4)^2 + (y - 1)^2 = 9$

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Question 6

The circle $(x - 5)^2 + (y + 2)^2 = 49$ has center

A) $(5,\ 2)$

B) $(-5,\ -2)$

C) $(5,\ -2)$

D) $(-5,\ 2)$

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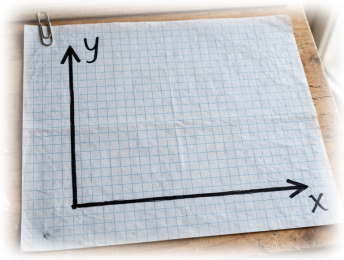

Question 7

The slope of the line through $(2,\ 1)$ and $(6,\ 9)$ is

A) 0.5

B) 2

C) -2

D) 8

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Question 8

A line perpendicular to a line of slope -2 has slope

A) 2

B) -2

C) 0.5

D) -0.5

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Question 9

The distance between $(0,\ 3)$ and $(4,\ 0)$ is ____

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Question 10

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

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ANSWER KEY

1. A
2. B
3. C
4. B
5. D
6. C
7. B
8. C
9. 5
10. 6.3

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