ARKANSAS ALGEBRA II · UNIT 1 · 10 QUESTIONS

Functions and Graphs — 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 **The vertex of $y = (x + 2)^2 - 6$ is**

- A (2, -6)
- B (-2, -6)
- C (2, 6)
- D (-2, 6)

Understand It with Pulse | Flag a mistake

2 **The inverse of f(x) = 2x - 9 is**

- **A** $f^{-1}(x) = \frac{x - 9}{2}$
- **B** $f^{-1}(x) = 2x + 9$
- **C** $f^{-1}(x) = \frac{x}{2} - 9$
- **D** $f^{-1}(x) = \frac{x + 9}{2}$

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3 **Given f(x) = x + 3 and g(x) = 2x - 4, the value of (f ° g)(5) is**

- **A** 13
- **B** 9
- **C** 6
- **D** 11

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4 The sum of the solutions of $|x + 1| = 9$ is

- A 18
- B 10
- C -2
- D -18

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5 The average rate of change of $f(x) = 2x + 1$ on the interval $0 \leq x \leq 5$ is

- A 11
- B 5
- C 1
- D 2

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6 **The y -intercept of y = 5x - 8 is**

A -8

B 5

C 8

D $\frac{8}{5}$

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7 **The function $f(x) = x^2 + x$ is**

A even

B odd

C neither even nor odd

D both even and odd

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8 **If f(x) = 4x - 7, then f(0) + f(3) is _____**

ANSWER _____

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9 **A linear function passes through (0, 3) and (4, 11). Its slope is**

A 4

B 3

C 8

D 2

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10 **The graph below shows $y = x^2 - 4$. The vertex of the graph is**

- **A** (4, 0)
- **B** (0, 4)
- **C** (0, -4)
- **D** (-4, 0)

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ANSWER KEY

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

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