WISCONSIN ALGEBRA 2 · 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 **Let f(x) = x + 1 for x < 2 and f(x) = 2x - 3 for x ≥ 2. The value of f(2) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The inverse of f(x) = 5x - 10 is**

A. $f^{-1}(x) = x + 10/5$

B. $f^{-1}(x) = 5x + 10$

C. $f^{-1}(x) = x/5 - 10$

D. $f^{-1}(x) = x - 10/5$

Understand It with Pulse | Flag a mistake

3 The point (6, 3) lies on the graph of y = f(x). The image of this point on the graph of y = f(2x) is

- A (6, 6)
- B (3, 6)
- C (12, 3)
- D (3, 3)

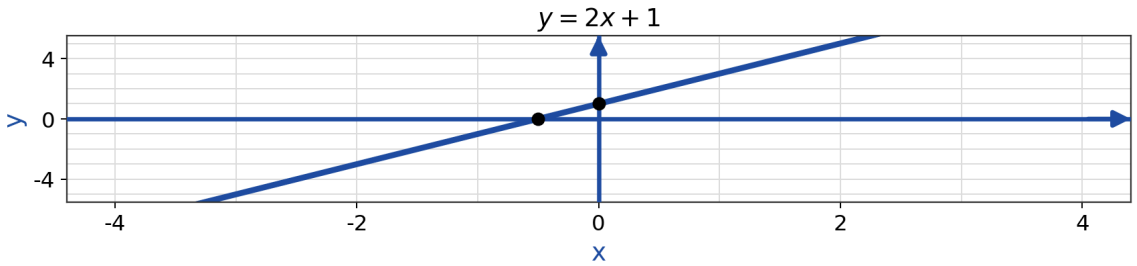
Understand It with Pulse | Flag a mistake

4 The average rate of change of f(x) = 3x + 2 on the interval 0 ≤ x ≤ 5 is

- A 17
- B 2
- C 3
- D 5

Understand It with Pulse | Flag a mistake

5 **The graph below shows y = 2x + 1. The y-intercept of the graph is**



- **A** 1
- **B** 2
- **C** -1
- **D** 0

Understand It with Pulse | Flag a mistake

6 **The function f(x) = x² is**

- **A** even
- **B** neither even nor odd
- **C** both even and odd
- **D** odd

Understand It with Pulse | Flag a mistake

7 The vertex of $y = |x + 1| - 2$ is

- A (-1, -2)
- B (1, 2)
- C (1, -2)
- D (-1, 2)

Understand It with Pulse | Flag a mistake

8 The domain of $f(x) = \sqrt{4 - x}$ is

- A $x < 4$
- B $x \geq 4$
- C $x \leq 4$
- D $x > 4$

Understand It with Pulse | Flag a mistake

9 **The larger solution of $|2x - 1| = 5$ is**

- **A** 2
- **B** -2
- **C** 3
- **D** -3

Understand It with Pulse | Flag a mistake

10 **If $f(x) = x^2 - 2x$, then an expression for $f(a + 1)$ is**

- **A** $a^2 + 1$
- **B** $a^2 - 2a - 1$
- **C** $a^2 + 2a + 1$
- **D** $a^2 - 1$

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.