DELAWARE PRECALCULUS · UNIT 1 · 25 QUESTIONS

Functions and Transformations — 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 inverse of f(x) = 3x + 5 evaluated at 20 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **For f(x) = 0x² + 5x + 2, find f(-2).**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Solve: x + y = 3, x - y = -5. The solution is**

A (-1, 4)

B (4, -1)

C (-1, -4)

D (1, 4)

Understand It with Pulse | Flag a mistake

4 **The graph of $y = x^2$, shifted 2 units left and 3 units down has equation**

A $y = x^2$

B $y = (x + 2)^2 - 3$

C $y = (x + 1)^2$

D $y = x^2 + 1$

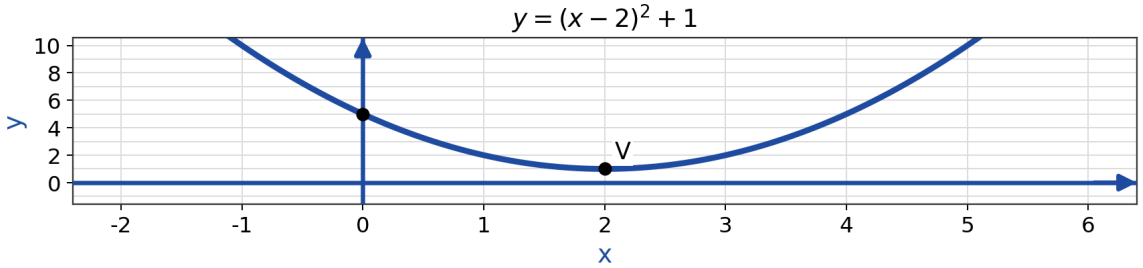
Understand It with Pulse | Flag a mistake

5 **The inverse of $f(x) = 3x + 3$ evaluated at 6 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 Which equation matches the graph shown?



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

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

C $y = x^2 + 1$

D $y = (x - 2)^2 - 1$

Understand It with Pulse | Flag a mistake

7 Solve: x + y = 5, x - y = 3. The solution is

A (1, 4)

B (4, 1)

C (4, -1)

D (-4, 1)

Understand It with Pulse | Flag a mistake

8 **The graph of $y = x^2$, shifted 3 units right and 1 units down has equation**

- **A** $y = x^2$
- **B** $y = (x + 1)^2$
- **C** $y = (x - 3)^2 - 1$
- **D** $y = x^2 + 1$

Understand It with Pulse | Flag a mistake

9 **The inverse of $f(x) = 4x + 5$ evaluated at 9 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **For $f(x) = 3x^2 + -5x + 2$, find $f(3)$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The vertex of the parabola $y = (x - -3)^2 + 3$ is**

- A (3, 3)
- B (-3, 3)
- C (-3, -3)
- D (0, 0)

Understand It with Pulse | Flag a mistake

12 **The graph of $y = x^2$, shifted 1 units right and 2 units down has equation**

- A $y = x^2$
- B $y = (x + 1)^2$
- C $y = x^2 + 1$
- D $y = (x - 1)^2 - 2$

Understand It with Pulse | Flag a mistake

13 **The inverse of f(x) = 4x + 1 evaluated at 21 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **For f(x) = -1x² + -5x + 2, find f(-3).**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The vertex of the parabola y = (x - 1)² + -2 is**

A (-1, -2)

B (1, 2)

C (1, -2)

D (0, 0)

Understand It with Pulse | Flag a mistake

16 **Solve: x + y = -1, x - y = 5. The solution is**

A (-3, 2)

B (2, 3)

C (-2, -3)

D (2, -3)

Understand It with Pulse | Flag a mistake

17 **The graph of $y = x^2$, shifted 4 units left and 3 units up has equation**

A $y = (x + 4)^2 + 3$

B $y = x^2$

C $y = (x + 1)^2$

D $y = x^2 + 1$

Understand It with Pulse | Flag a mistake

18 **The inverse of f(x) = 4x + 3 evaluated at 19 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **For $f(x) = 3x^2 + -4x + 2$, find f(2).**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **The vertex of the parabola $y = (x - -4)^2 + -3$ is**

A (4, -3)

B (-4, 3)

C (0, 0)

D (-4, -3)

Understand It with Pulse | Flag a mistake

21 **The graph of $y = x^2$, shifted 3 units left and 0 units down has equation**

- **A** $y = x^2$
- **B** $y = (x + 3)^2 + 0$
- **C** $y = (x + 1)^2$
- **D** $y = x^2 + 1$

Understand It with Pulse | Flag a mistake

22 **The inverse of $f(x) = 4x + 2$ evaluated at 14 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **For $f(x) = x^2 + 1x + 2$, find $f(-1)$.**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 The vertex of the parabola $y = (x - -2)^2 + -2$ is

A (-2, -2)

B (2, -2)

C (-2, 2)

D (0, 0)

Understand It with Pulse | Flag a mistake

25 The graph of $y = x^2$, shifted 1 units left and 3 units down has equation

A $y = x^2$

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

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

D $y = x^2 + 1$

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.