CONNECTICUT 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 graph of $y = 1(x - 2)^2 + 3$ is the graph of $y = x^2$ shifted**

- A right and up
- B left and down
- C right only
- D up only

Understand It with Pulse | Flag a mistake

2 The graph of $y = 2(x + 1)^2 + 4$ is the graph of $y = x^2$ shifted

- A left and down
- B left and up
- C right only
- D up only

Understand It with Pulse | Flag a mistake

3 The graph of $y = 1(x - 3)^2 - 2$ is the graph of $y = x^2$ shifted

- A left and down
- B right only
- C right and down
- D up only

Understand It with Pulse | Flag a mistake

4 **The graph of $y = 3(x - 1)^2 + 5$ is the graph of $y = x^2$ shifted**

- A left and down
- B right only
- C up only
- D right and up

Understand It with Pulse | Flag a mistake

5 **The graph of $y = 2(x - 4)^2 + 1$ is the graph of $y = x^2$ shifted**

- A right and up
- B left and down
- C right only
- D up only

Understand It with Pulse | Flag a mistake

6 **For $f(x) = x^3$, f(2) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **For $f(x) = x^3$, f(3) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **For $f(x) = x^3$, f(4) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **For $f(x) = x^3$, f(5) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **For $f(x) = x^3$, f(1) is**

ANSWER

Understand It with Pulse | Flag a mistake

11 **For f(x) = 2x + 1 , f(3) is**

ANSWER

Understand It with Pulse | Flag a mistake

12 **For f(x) = 3x + 1 , f(2) is**

ANSWER

Understand It with Pulse | Flag a mistake

13 **For f(x) = 1x + 1 , f(5) is**

ANSWER

Understand It with Pulse | Flag a mistake

14 **For f(x) = 4x + 1 , f(2) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **For f(x) = 2x + 1 , f(4) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **The vertex of y =(x - 2)² + 3 is**

A (-2, 3)

B (2, -3)

C (0, 0)

D (2, 3)

Understand It with Pulse | Flag a mistake

17 **The vertex of $y = (x + 1)^2 + 4$ is**

A (-1, 4)

B (1, 4)

C (-1, -4)

D (0, 0)

Understand It with Pulse | Flag a mistake

18 **The vertex of $y = (x - 3)^2 - 2$ is**

A (-3, -2)

B (3, -2)

C (3, 2)

D (0, 0)

Understand It with Pulse | Flag a mistake

19 The vertex of $y = (x - 1)^2 + 5$ is

- A (-1, 5)
- B (1, -5)
- C (1, 5)
- D (0, 0)

Understand It with Pulse | Flag a mistake

20 The vertex of $y = (x - 4)^2 + 1$ is

- A (-4, 1)
- B (4, -1)
- C (0, 0)
- D (4, 1)

Understand It with Pulse | Flag a mistake

21 **For f(x) = 2x + 3 , the value at x = 0 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **For f(x) = 3x -1 , the value at x = 0 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **For f(x) = -2x + 7 , the value at x = 0 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **For f(x) = 4x + 1 , the value at x = 0 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **For f(x) = 5x -3 , the value at x = 0 is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**10.**	1	**19.**	C
2.	B	**11.**	7	**20.**	D
3.	C	**12.**	7	**21.**	3
4.	D	**13.**	6	**22.**	-1
5.	A	**14.**	9	**23.**	7
6.	8	**15.**	9	**24.**	1
7.	27	**16.**	D	**25.**	-3
8.	64	**17.**	A		
9.	125	**18.**	B		

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