MANITOBA PRE-CALCULUS MATHEMATICS 30S · UNIT B · 25 QUESTIONS

Absolute Value of Numbers and Functions — 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 **Evaluate $f(x) = a\,x^2 + b\,x + c$ when $a = 1$, $b = 1$, $c = 1$, and $x = 2$. The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **Evaluate 2×2^3 . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Let $f(x) = 4x + 5$ and $g(x) = 3x + 4$. The value of $f(g(4))$ is**

ANSWER _____

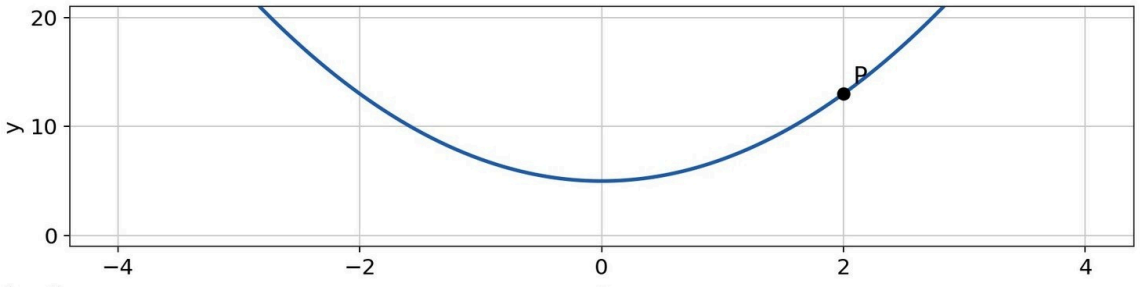
Understand It with Pulse | Flag a mistake

4 **Let f(x) = 6x + 1 . The inverse function at 19 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **The graph shows y = 2x + 5 . The value of f(2) is**



ANSWER _____

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6 **A polygon with five sides is a**

A hexagon

B octagon

C heptagon

D pentagon

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7 **A polygon with six sides is a**

A hexagon

B pentagon

C octagon

D decagon

Understand It with Pulse | Flag a mistake

8 **A straight line graph has a slope that is**

A increasing

B constant

C zero always

D undefined always

Understand It with Pulse | Flag a mistake

9 **A triangle with all sides equal is**

A isosceles

B scalene

C equilateral

D right

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10 **The distance around a circle is the**

A diameter

B radius

C circumference

D area

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11 **The highest or lowest point of a parabola is the**

- A vertex
- B intercept
- C axis
- D root

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12 **The line that divides a parabola into two equal halves is the**

- A directrix
- B axis of symmetry
- C asymptote
- D tangent

Understand It with Pulse | Flag a mistake

13 **The point where a graph crosses the x axis is the**

A y intercept

B vertex

C origin

D x intercept

Understand It with Pulse | Flag a mistake

14 **The point where a graph crosses the y axis is the**

A x intercept

B vertex

C y intercept

D origin

Understand It with Pulse | Flag a mistake

15 **The vertex of the parabola $f(x) = 2x^2 - 12x + 3$ has x coordinate**

ANSWER _____

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16 **Evaluate $f(x) = a\,x^2 + b\,x + c$ when $a = 1$, $b = 5$, $c = 1$, and $x = 4$. The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **Evaluate 4×2^3 . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **Let $f(x) = 2x + 5$ and $g(x) = 3x + 3$. The value of $f(g(4))$ is**

ANSWER _____

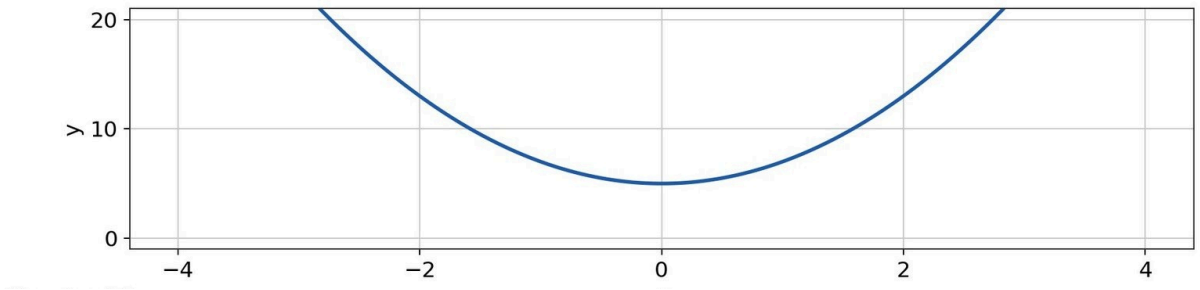
Understand It with Pulse | Flag a mistake

19 **Let f(x) = 2x + 7 . The inverse function at 17 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **The graph shows y = 2x + 5 . The value of f(4) is**



ANSWER _____

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21 **Evaluate f(x) = a x² + b x + c when a = 3 , b = 7 , c = 7 , and x = 5 . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **Evaluate 3 × 2² . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 Let f(x) = 4x + 5 and g(x) = 3x + 6 . The value of f(g(4)) is

ANSWER

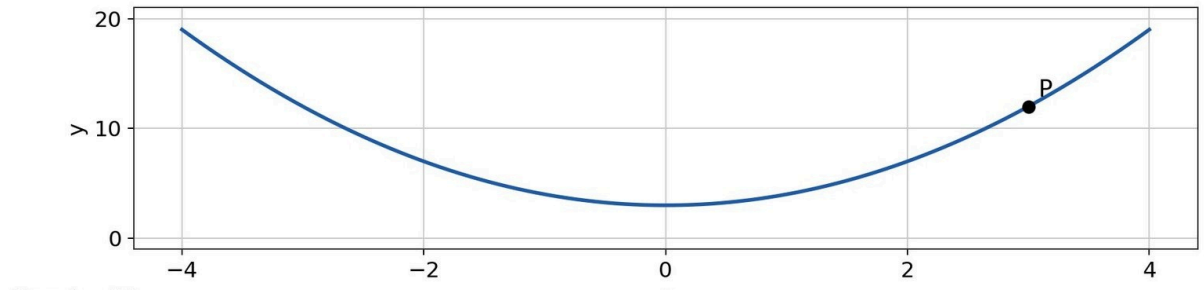
Understand It with Pulse | Flag a mistake

24 Let f(x) = 3x + 3 . The inverse function at 21 is

ANSWER

Understand It with Pulse | Flag a mistake

25 The graph shows y = 1x + 3 . The value of f(3) is



ANSWER

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ANSWER KEY

1. 7
2. 16
3. 69
4. 3
5. 13
6. D
7. A
8. B
9. C
10. C
11. A
12. B
13. D
14. C
15. 3
16. 37
17. 32
18. 35
19. 5
20. 37
21. 117
22. 12
23. 77
24. 6
25. 12

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