MANITOBA PRE-CALCULUS MATHEMATICS 40S · UNIT C · 25 QUESTIONS

Function Transformations, Operations, Compositions and Inverses — 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 $g(x) = 3x + 3$. The value of $f(g(4))$ is**

ANSWER _____

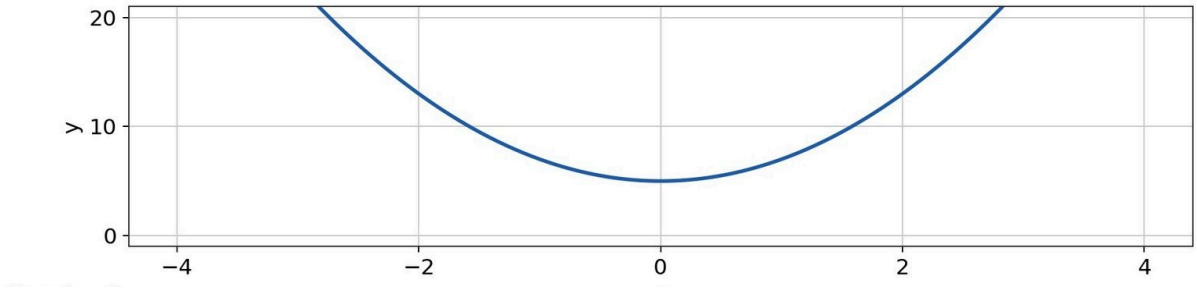
Understand It with Pulse | Flag a mistake

4 **Let f(x) = 2x + 1 . The inverse function at 15 is**

ANSWER

Understand It with Pulse | Flag a mistake

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



ANSWER

Understand It with Pulse | Flag a mistake

6 **The vertex of the parabola f(x) = 2x² -16x + 3 has x coordinate**

ANSWER

Understand It with Pulse | Flag a mistake

7 **A triangle with no sides equal is**

A isosceles

B equilateral

C scalene

D right

Understand It with Pulse | Flag a mistake

8 **A triangle with two sides equal is**

A equilateral

B isosceles

C scalene

D obtuse

Understand It with Pulse | Flag a mistake

9 **An angle measuring 90 degrees is a**

A acute angle

B obtuse angle

C straight angle

D right angle

Understand It with Pulse | Flag a mistake

10 **Half of the diameter of a circle is the**

A circumference

B radius

C chord

D arc

Understand It with Pulse | Flag a mistake

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

A circumference

B diameter

C radius

D area

Understand It with Pulse | Flag a mistake

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

A intercept

B axis

C vertex

D root

Understand It with Pulse | Flag a mistake

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

A directrix

B asymptote

C tangent

D axis of symmetry

Understand It with Pulse | Flag a mistake

14 **The longest side of a right triangle is the**

A adjacent

B opposite

C leg

D hypotenuse

Understand It with Pulse | Flag a mistake

15 **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

16 **Evaluate 4×2^3 . The result is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

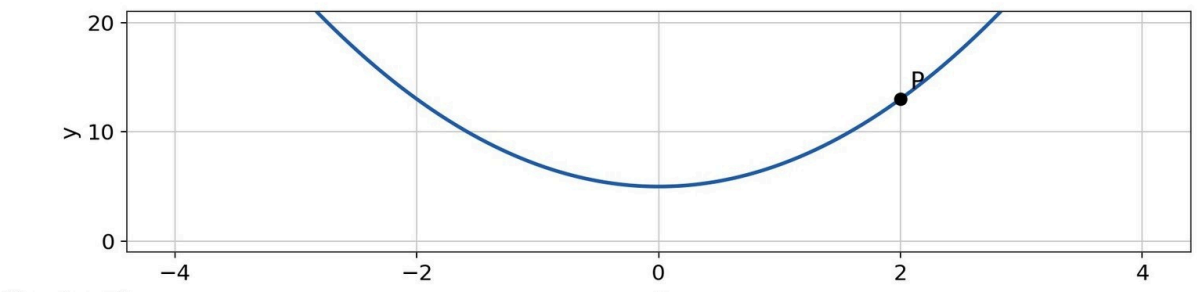
Understand It with Pulse | Flag a mistake

18 **Let $f(x) = 3x + 7$. The inverse function at 34 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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



ANSWER

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20 The vertex of the parabola f(x) = 2x² -20x + 3 has x coordinate

ANSWER

Understand It with Pulse | Flag a mistake

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 + 5 . The value of f(g(4)) is

ANSWER

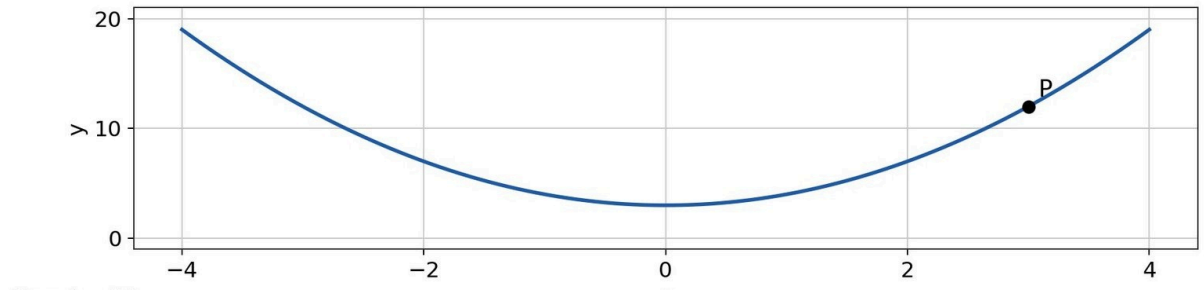
Understand It with Pulse | Flag a mistake

24 Let f(x) = 4x + 3 . The inverse function at 11 is

ANSWER

Understand It with Pulse | Flag a mistake

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



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 7
2. 16
3. 65
4. 7
5. 37
6. 4
7. C
8. B
9. D
10. B
11. A
12. C
13. D
14. D
15. 37
16. 32
17. 33
18. 9
19. 13
20. 5
21. 117
22. 12
23. 73
24. 2
25. 12

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