MANITOBA APPLIED MATHEMATICS 30S · UNIT B · 25 QUESTIONS

Quadratic 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 **Let f(x) = 3x + 7 . The inverse function at 28 is**

ANSWER _____

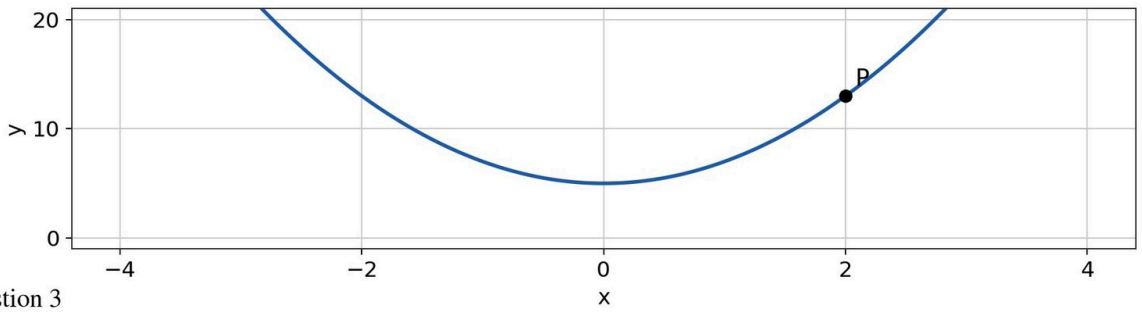
Understand It with Pulse | Flag a mistake

2 **Evaluate 2×2^3 . The result is**

ANSWER _____

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



Question 3

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

ANSWER _____

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

ANSWER _____

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5 **The vertex of the parabola $f(x) = 2x^2 - 4x + 3$ has x coordinate**

ANSWER _____

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6 **Let $f(x) = 2x + 5$ and $g(x) = 3x + 6$. The value of $f(g(4))$ is**

ANSWER _____

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7 **Let $f(x) = 4x + 4$. The inverse function at 40 is**

ANSWER _____

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8

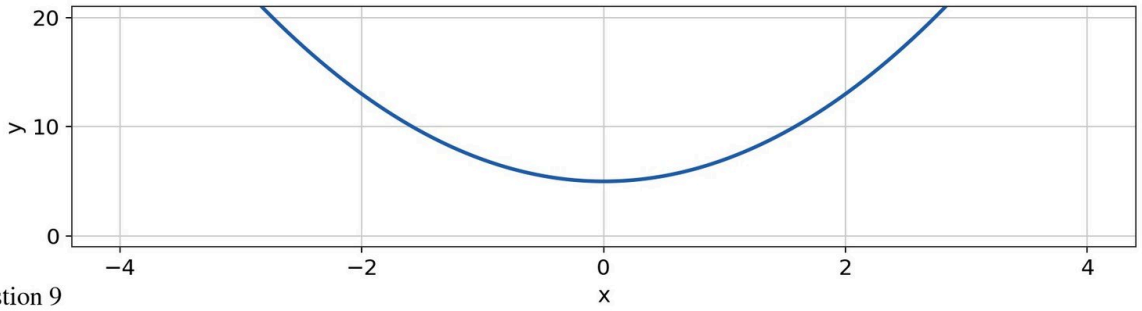
Evaluate 4×2^3 . The result is

ANSWER

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9

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



Question 9

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

ANSWER

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10

Evaluate f(x) = a x² + b x + c when a = 1 , b = 1 , c = 1 , and x = 2 . The result is

ANSWER

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11 **The vertex of the parabola $f(x) = 2x^2 - 8x + 3$ has x coordinate**

ANSWER _____

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

ANSWER _____

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13 **Let $f(x) = 5x + 1$. The inverse function at 16 is**

ANSWER _____

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

ANSWER _____

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15 **The vertex of the parabola $f(x) = 2x^2 - 16x + 3$ has x coordinate**

ANSWER _____

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

A increasing

B constant

C zero always

D undefined always

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17 **The slope of a horizontal line is**

A one

B undefined

C zero

D negative

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18 **The slope of a vertical line is**

A zero

B one

C negative

D undefined

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19 **Two lines that never meet are**

A parallel

B perpendicular

C intersecting

D coincident

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20 **Two lines that meet at a right angle are**

A parallel

B perpendicular

C coincident

D skew

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

A x intercept

B vertex

C y intercept

D origin

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

A y intercept

B vertex

C origin

D x intercept

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

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

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

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

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

A isosceles

B scalene

C equilateral

D right

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ANSWER KEY

1.	7	**10.**	7	**19.**	A
2.	16	**11.**	2	**20.**	B
3.	13	**12.**	73	**21.**	C
4.	37	**13.**	3	**22.**	D
5.	1	**14.**	33	**23.**	A
6.	41	**15.**	4	**24.**	B
7.	9	**16.**	B	**25.**	C
8.	32	**17.**	C		
9.	37	**18.**	D		

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