FUNCTIONS: POLYNOMIAL, EXPONENTIAL, LOGARITHMIC, AND SINUSOIDAL - PRACTICE TEST | NEW BRUNSWICK FOUNDATIONS OF MATHEMATICS 120 · UNIT E · 25 QUESTIONS

Functions: Polynomial, Exponential, Logarithmic, and Sinusoidal — 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 **A sinusoidal function has amplitude 2 and period 180 degrees. Its maximum value, if its midline is 0, is**

- **A** 2
- **B** 3
- **C** 1
- **D** 4

Understand It with Pulse | Flag a mistake

2 **A sinusoidal function has amplitude 5 and period 90 degrees. Its maximum value, if its midline is 0, is**

- **A** 6
- **B** 5
- **C** 4
- **D** 10

Understand It with Pulse | Flag a mistake

3 **A sinusoidal function has amplitude 4 and period 360 degrees. Its maximum value, if its midline is 0, is**

- **A** 5
- **B** 3
- **C** 4
- **D** 8

Understand It with Pulse | Flag a mistake

4 **For f(x) = 5x + 4 , the value of f(4) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **For f(x) = 1x + 5 , the value of f(4) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **For f(x) = 2x + 6 , the value of f(4) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **For f(x) = $1x^2$ + 0x + 3 , the value of f(2) is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **For $f(x) = 2x^2 - 3x + 2$, the value of $f(2)$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **For $f(x) = 1x^2 - 4x + 5$, the value of $f(2)$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Evaluating $f(x) = x^2 - 1$ at $x = 3$ gives**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The function $f(x) = 3x - 2$ has value 7 when x is**

ANSWER _____

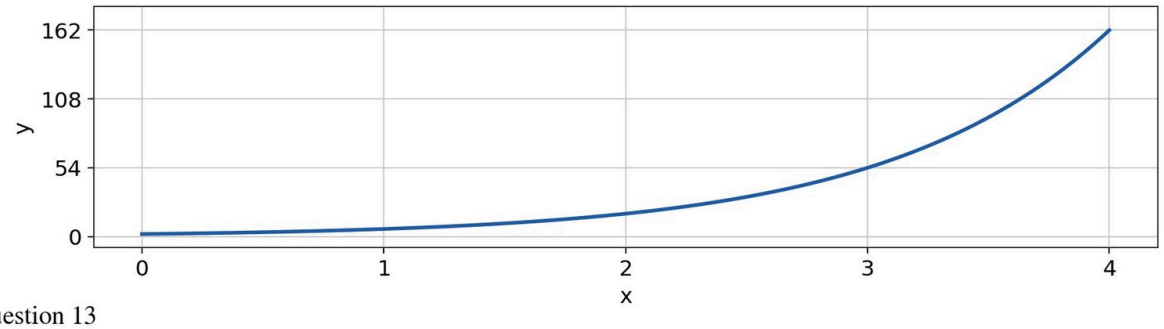
Understand It with Pulse | Flag a mistake

12 **If f(x) = x² + 2x , then f(-1) is**

ANSWER

Understand It with Pulse | Flag a mistake

13 **The graph shows an exponential function. The value of x for which the function value is 54 is**



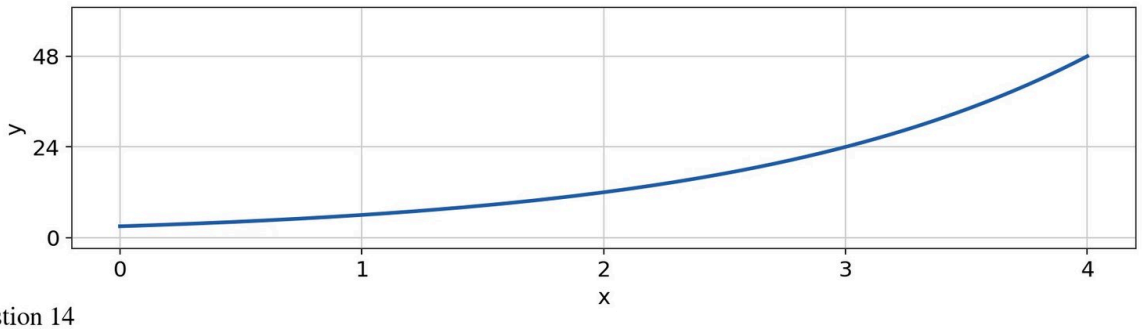
Question 13

The graph shows an exponential function. The value of x for which the function value is 54 is

ANSWER

Understand It with Pulse | Flag a mistake

14 **The graph shows an exponential function. The value of x for which the function value is 24 is**



Question 14

The graph shows an exponential function. The value of x for which the function value is 24 is

ANSWER

Understand It with Pulse | Flag a mistake

15 **For the exponential function $f(x) = 5 \times 1^x$, the value of f(2) is**

ANSWER

Understand It with Pulse | Flag a mistake

16 **The exponential function $f(x) = 4(3)^x$ has value at x = 2 of**

ANSWER

Understand It with Pulse | Flag a mistake

17 **A function is $f(x) = 2(5)^x$. The value of f(1) is**

ANSWER

Understand It with Pulse | Flag a mistake

18 **The value of the exponential function $f(x) = 10^x$ at x = 3 is**

ANSWER

Understand It with Pulse | Flag a mistake

19 **The value of log base 2 of 8 is**

ANSWER

Understand It with Pulse | Flag a mistake

20 **The value of log base 10 of 100 is**

ANSWER

Understand It with Pulse | Flag a mistake

21 **The value of log base 2 of 32 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **Solving $5^x = 125$ gives x =**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **The logarithm base 2 of 8 equals**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **If log base 4 of x is 2, then x is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A sinusoidal function has a maximum of 8 and a minimum of 2. Its amplitude is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**10.**	8	**19.**	3
2.	B	**11.**	3	**20.**	2
3.	C	**12.**	-1	**21.**	5
4.	24	**13.**	3	**22.**	3
5.	9	**14.**	3	**23.**	3
6.	14	**15.**	5	**24.**	16
7.	7	**16.**	36	**25.**	3
8.	4	**17.**	10		
9.	1	**18.**	1000		

© 2026 Brett Robbins. All Rights Reserved.