

Sequences and Functions Test Review HW

Know your vocab!

Fill in the blank from the word bank.

Function	Relation	Domain	Range
Arithmetic	Geometric	Common Difference	Term
		Common ratio	

1. Any set of ordered pairs is called a _____.
2. A sequence where the same number is added to each term is _____.
3. The y-values, or output values are called the _____.
4. The _____ is the number that is multiplied to each term in a sequence.
5. When no x-values repeat, or a vertical line passes through a graph only once, the relation is called a _____.
6. The set of x-values or the input values are called the _____.
7. The number that is added to each term in a sequence the _____
_____.
8. Any number in a sequence is called a _____.
9. A sequence where the same number is multiplied to each term is _____.

For each sequence, identify the type of sequence and common difference or ratio. Then find the next 3 terms and write an expression to show how to get to the next term.

10. 11.5, 7.5, 3.5, -0.5...

Type of sequence _____ Common difference or ratio _____

Expression _____ Next 3 terms _____, _____, _____

11. -2, 12, -72, 432...

Type of sequence _____ Common difference or ratio _____

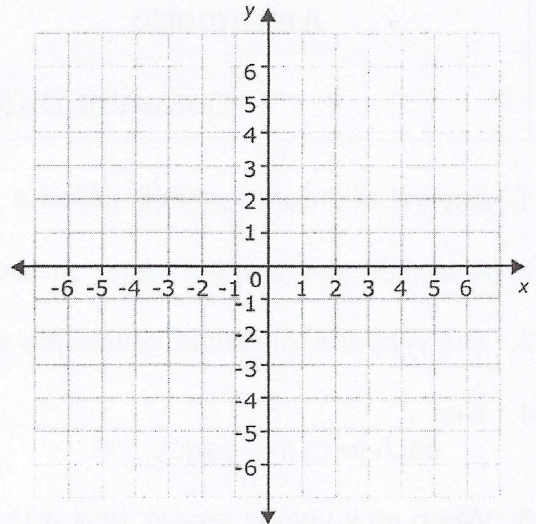
Expression _____ Next 3 terms _____, _____, _____

12. Find the 7th term in the sequence 3, 15, 75, 375...

13. Write an equation to represent the following:

Two less than three times a number equals another number

Then make a function table listing ordered pairs and graph them on the coordinate plane.



14. Which table contains solutions to the equation $y = -4x + 1$?

A

x	y
-2	9
0	-1
2	-9

B

x	y
1	-5
0	-4
2	-2

C

x	y
-3	13
3	-11
2	9

D

x	y
-1	5
0	1
1	-3

15. Which equation represents the following table?

x	6	8	12	20
y	8	9	11	15

a. $x + 2 = y$

b. $2x - 4 = y$

c. $\frac{1}{2}x + 5 = y$

d. $3x - 10 = y$

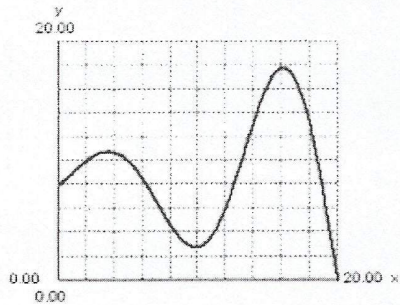
16. Circle each relation that is a function.

a. $\{(2,4), (3,7), (4,9), (5,10)\}$

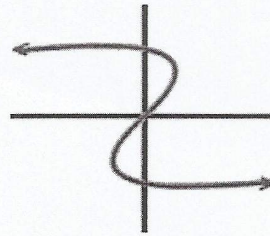
b.

x	0	6	8	12
y	2	2	2	2

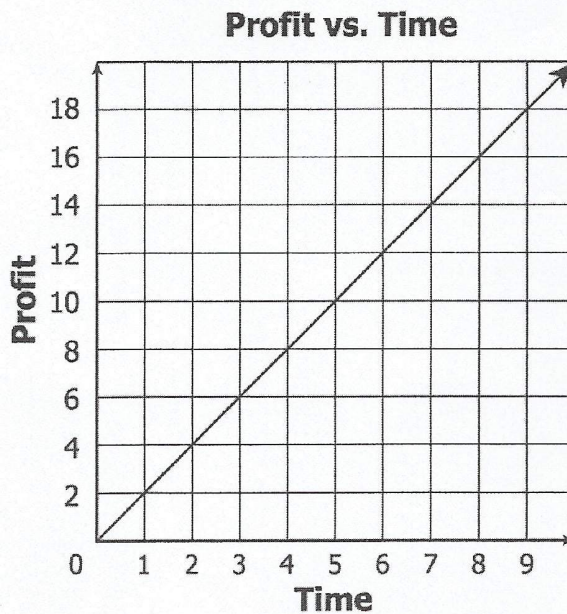
c.



d.



17. The graph displays the relationship between time and profit.



Which equation represents the relationship between time (t) and profit (P) ?

A $P = \frac{1}{2}t$

B $P = t$

C $P = 2t$

D $P = 3t$