

Warm-Up

Graph each ordered pair on a coordinate plane.

1. (2, -4) 2. (0, 3) 3. (-1, -2) 4. (-3, 0)

For each of the following recursive number sequences, find a pattern. Write a NOW-NEXT equation for the pattern. Then write the next term in the sequence.

5. 5, 8, 11, 14, 17, ... 6. 1, -2, 4, -8, 16, ...

Homework Answers

1a) 7, 9, 11 1b) NEXT = NOW + 2
 1c) 21 1d) 1-3

2) -27.4, -18.2, -9, .2, 9.4, 18.6
 NEXT = NOW + 9.2

3a) NEXT = NOW - 4.2 3b) NEXT = NOW + 2.7
 3c) NEXT = NOW * 3 3d) NEXT = NOW * (1/3)

Vocabulary

_____ : The set of all inputs of x- values

_____ : an equation that tells how to calculate an output value based on a given input value

_____ : a value that is entered

_____ : a repetitive process

_____ : a diagram that matches input values with their corresponding output values using arrows

_____ : a value that is calculated from the input value using a set rule

More Vocabulary

_____ : the set of all outputs or y-values

_____ : an equation that shows how to calculate the value of the next term in a sequence from the value of the current term (or a combination of previous terms)

_____ : a set of ordered pairs

_____ : a list of numbers where each term is based on the previous term or a combination of previous terms using a set pattern or rule

Guess My Rule:

- On the lined side of the note card, write a sequence of numbers.
- On the other side write the NOW- NEXT equation.
- When I say go, you will walk around the room until I say stop.
- The person you are next to will be your partner.
- Exchange cards and see if you can guess each others rule

Find the Dependent Values and write the NOW-NEXT equation.

Term	1	2	3	4
Value				

Term	1	2	3	4
Value				

YOU TRY!!! Find the Dependent Values and write the NOW-NEXT equation.

Term	1	2	3	4
Value				

Term	1	2	3	4
Value				

Let's go back to patterns... Write the equation.

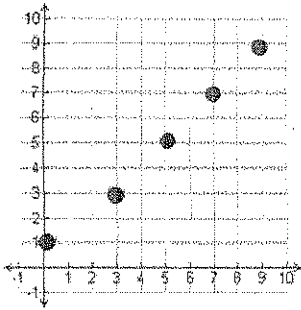
- 1) 2, 4, 8, 16...
- 2) 2, 4, 6, 8...
- 3) 2, 6, 14, 30...
- 4) 3, 8, 23, 68...
- 5) 5, -10, 20, -40...
- 6) 5, -13, 41, -121...

CAUTION: There might be more than one thing happening to get to the next term!

Day 2 Notes: Recursive Patterns and Graphs

Find the dependent values and write the NOW- NEXT equation.

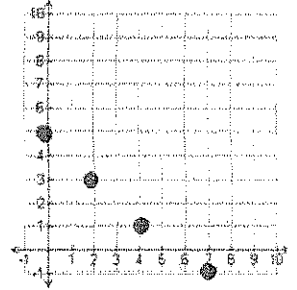
Example 1:



Term	1	2	3	4
Value				

Example 2:

Term	1	2	3	4
Value				

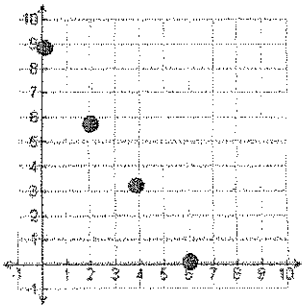


NOW- NEXT Equation: _____

NOW- NEXT Equation: _____

You Try! Find the dependent values and write the NOW- NEXT equation.

1)

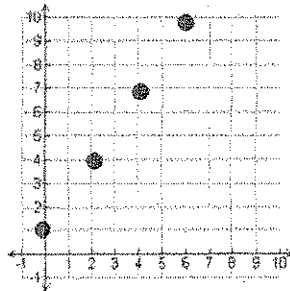


Term	1	2	3	4
Value				

NOW- NEXT Equation: _____

2)

Term	1	2	3	4
Value				



NOW- NEXT Equation: _____