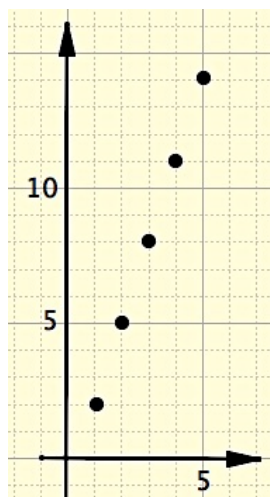## *READY*

Topic: Rates of change in a table and a graph

The same sequence is shown in both a table and a graph. Indicate on the table where you see the rate of change of the sequence. Then draw on the graph where you see the rate of change.
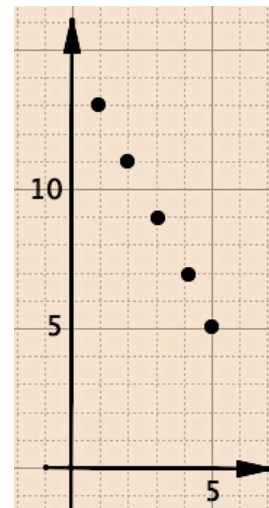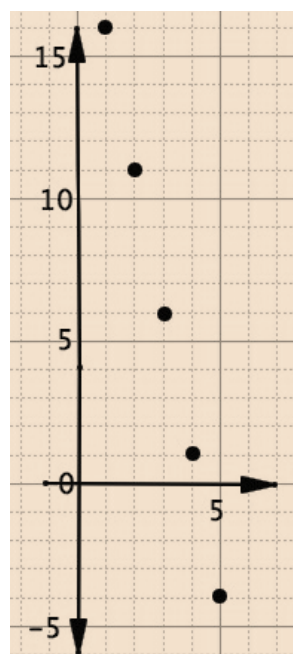
1.

n	$f(n)$
1	2
2	5
3	8
4	11
5	14

2.

n	$f(n)$
1	13
2	11
3	9
4	7
5	5

3.

n	$f(n)$
1	16
2	11
3	6
4	1
5	−4

4.

n	$f(n)$
1	0
2	4
3	8
4	12
5	16

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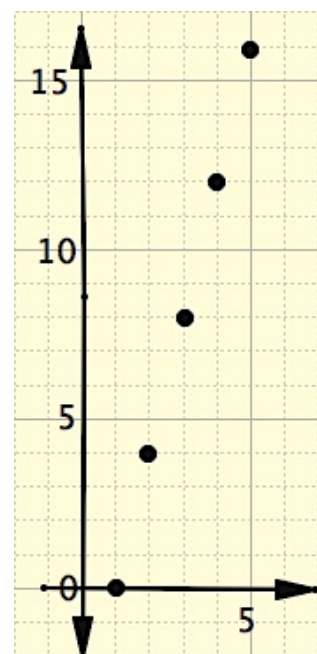
SET

Topic: Recursive and explicit functions of **geometric** sequences

Below you are given various types of information. Write the recursive and explicit functions for each <u>geometric sequence</u>. Finally, graph each sequence, making sure you clearly label your axes.
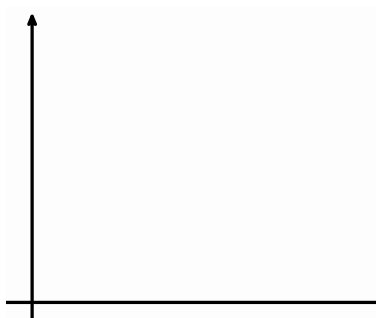
5.   2 , 4 , 8 , 16 , …

6.

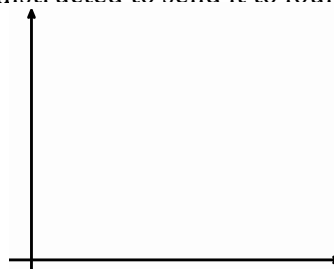| Time (days)	Number of cells
1	3
2	6
3	12
4	24

Recursive:_____

Recursive:_____

Explicit:_____

Explicit:_____

7. Claire has $300 in an account. She decides she is going to take out half of what's left in there at the end of each month.
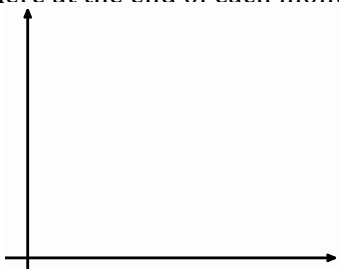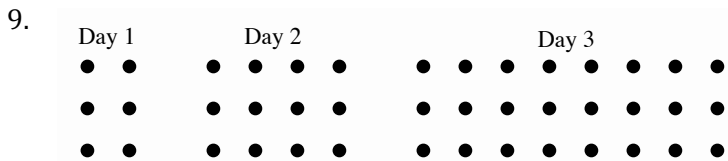
8. Tania creates a chain letter and sends it to four friends. Each day each friend is then instructed to send it to four friends and so forth.

Recursive:_____

Recursive:_____

Explicit:_____

Explicit:_____

9.

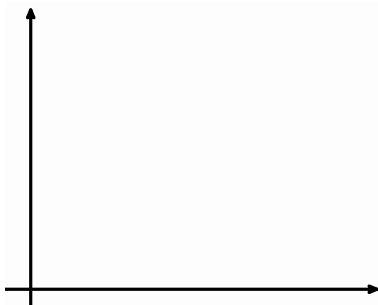Day 1   Day 2   Day 3

Recursive:_____

Explicit:_____

GO

Topic: Recursive and explicit functions of __arithmetic__ sequences

Below you are given various types of information. Write the recursive and explicit functions for each __arithmetic sequence__. Finally, graph each sequence, making sure you clearly label your axes.
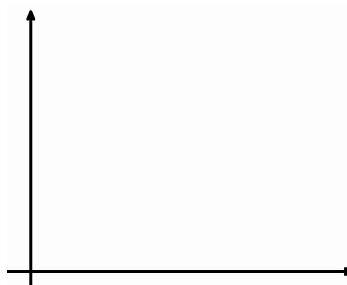
10.   2 , 4 , 6 , 8 , …

11.

Time (days)	Number of cells
1	3
2	6
3	9
4	12

Recursive:_____

Explicit:_____

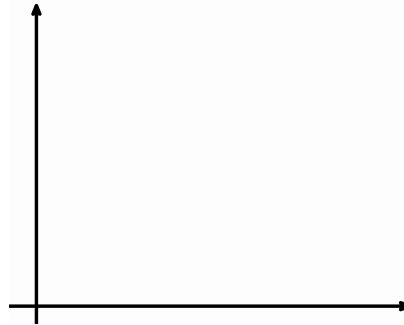Recursive:_____

Explicit:_____

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12. Claire has $300 in an account. She decides she is going to take out $25 each month.
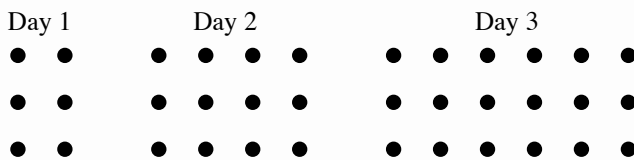
Recursive:_____

Explicit:_____

13. Each day Tania decides to do something nice for 2 strangers. What is the relationship between the number people helped and days?

Recursive:_____

Explicit:_____

14.

Day 1   Day 2   Day 3

Recursive:_____

Explicit:_____