

READY, SET, GO!

Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

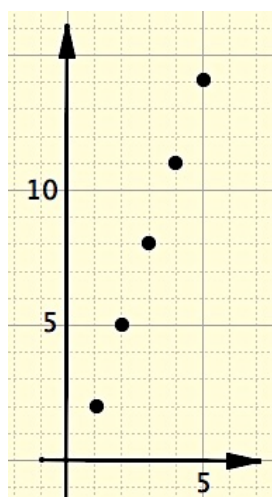
**READY**

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.

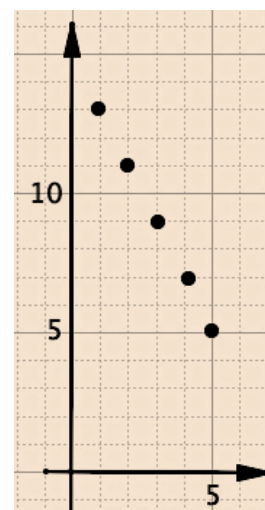
1.

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



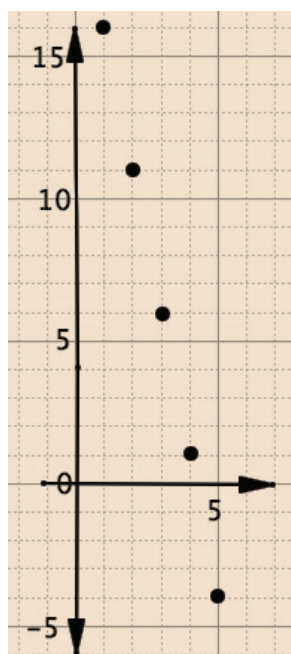
2.

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



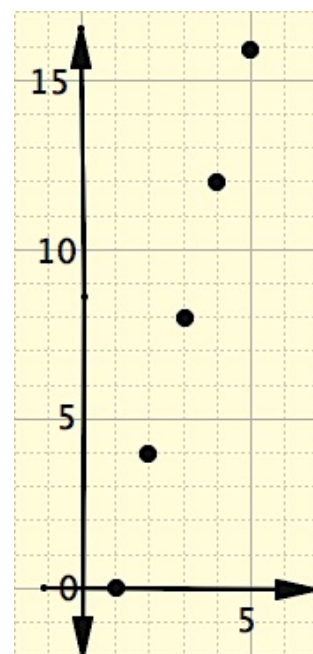
3.

$n$	$f(n)$
1	16
2	11
3	6
4	1
5	-4



4.

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

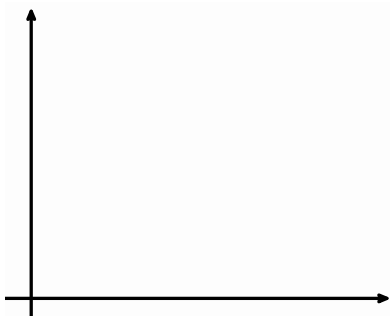


**SET**

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

**Below you are given various types of information. Write the recursive and explicit functions for each geometric sequence. Finally, graph each sequence, making sure you clearly label your axes.**

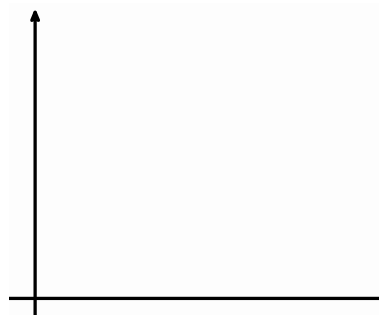
5. 2, 4, 8, 16, ...



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

6.



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

Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

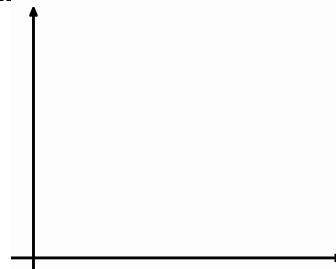
7. Claire has \$300 in an account. She decides she is going to take out half of what's left in there at the end of each month.



Recursive: \_\_\_\_\_

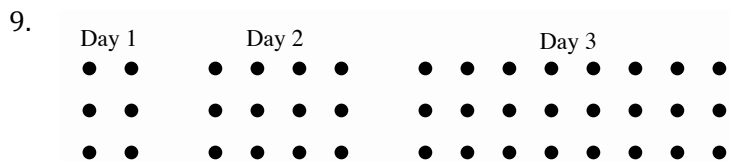
Explicit: \_\_\_\_\_

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.



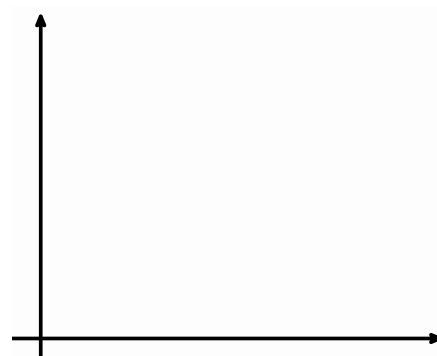
Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

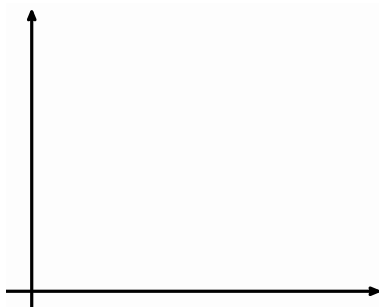


## GO

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.**

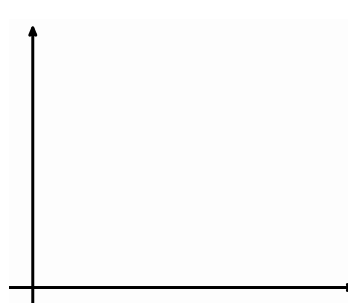
10. 2, 4, 6, 8, ...



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

11.



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

Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

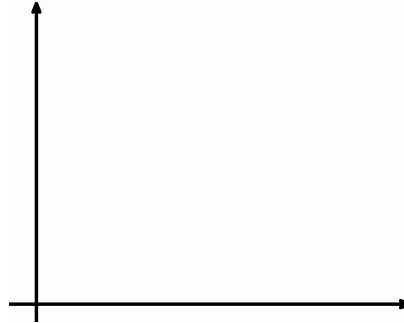
12. Claire has \$300 in an account. She decides she is going to take out \$25 each month.



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

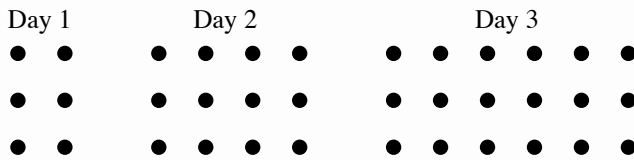
13. Each day Tania decides to do something nice for 2 strangers. What is the relationship between the number people helped and days?



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

14.



Recursive: \_\_\_\_\_

Explicit: \_\_\_\_\_

