## READY

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 |


3.

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

2. 

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


4.

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



ALGEBRA I // MODULE 1
SEQUENCES-1.5
SET
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. $2,4,8,16, \ldots$


Recursive $\qquad$


| Time <br> (days) | Number <br> of cells |
| :--- | :--- |
| 1 | 3 |
| 2 | 6 |
| 3 | 12 |
| 4 | 24 |

Recursive: $\qquad$

Explicit: $\qquad$ Explicit: $\qquad$
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: $\qquad$

Explicit: $\qquad$

Recursive: $\qquad$

Explicit: $\qquad$
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.

9.


Recursive: $\qquad$

Explicit: $\qquad$


GO
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. $2,4,6,8, \ldots$


Recursive: $\qquad$

Explicit: $\qquad$


Recursive: $\qquad$

Explicit: $\qquad$

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ALGEBRA I // MODULE 1
SEQUENCES - 1.5
12. Claire has $\$ 300$ in an account. She decides she is going to take out $\$ 25$ each month.


Recursive: $\qquad$ _

Recursive: $\qquad$

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


Explicit: $\qquad$
14.


Recursive: $\qquad$

Explicit: $\qquad$

