HW 4-2

Sec 1 **More Arithmetic Sequences** **Unit 4**

For the remaining questions, determine if the sequence is arithmetic or not.
If <u>yes</u>, then write the recursive and explicit equation for the sequence.

1.   -19, -11, -3, …

    a) Recursive: _____

    b) Explicit: _____

    c) Find the 20th term: _____

2.   9, 22, 35, …

    a) Recursive: _____

    b) Explicit: _____

    c) Find the -11th term: _____

3.   -10, -7, -4, -1, …

    a) Recursive: _____

    b) Explicit: _____

    c) Find the 100th term: _____

4.

x	6	7	8	9	10	11	12
$f(x)$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{4}$				

    a) Recursive: _____

    b) Explicit: _____

    c) Find the -8th term: _____

For the remaining questions, determine if the sequence is arithmetic or not.
If yes, then write the recursive and explicit equation for the sequence.

5.

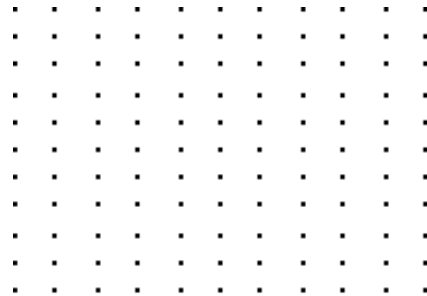| x	-5	-4	-3	-2
$f(x)$	12.7	16.4	20.1	23.8

a) Recursive: _____

b) Explicit: _____

c) Find the 4th term: _____

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.
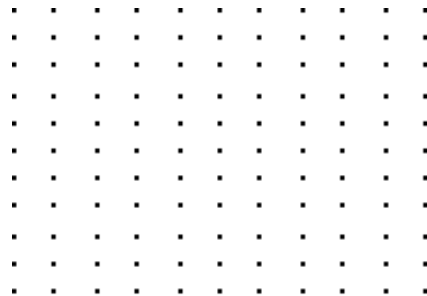
6. 2, 4, 6, 8, …

Recursive: _____

Explicit: _____

7.

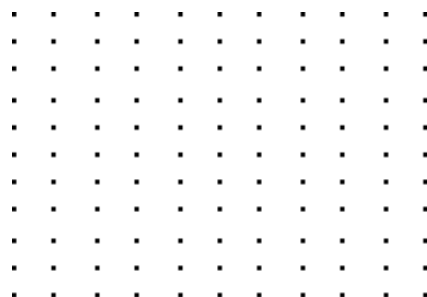| Time (days)	Number of cells
1	3
2	6
3	9
4	12

Recursive: _____

Explicit: _____

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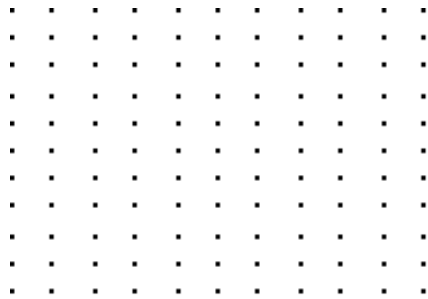
Recursive: _____

Explicit: _____

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.

9. Each day Tania decides to do something nice for 2 strangers.

Recursive: _____

Explicit: _____

For Problems 10-12
Write the recursive and explicit equation.

10. You run a business making birdhouses. You spend $600 to start your business, and it costs you $5.00 to make each birdhouse.

# of birdhouses	0	1	2	3	4	5	6
Total cost to build							

Recursive: _____

Explicit: _____

11. You borrow $500 from a relative, and you agree to pay back the debt at a rate of $15 each month.

# of months	0	1	2	3	4	5	6
Amount of $ owed							

Recursive: _____

Explicit: _____

12. You earn $10 a week.

# of weeks	0	1	2	3	4	5	6
Amount of $ saved							

Recursive: _____

Explicit: _____

Write the recursive and explicit equation.

13.

x	f(x)
-9	11
-8	38
-7	65

Recursive:

Explicit:

14.

x	f(x)
5	9.6
6	4.9
7	0.2

Recursive:

Explicit:

15.

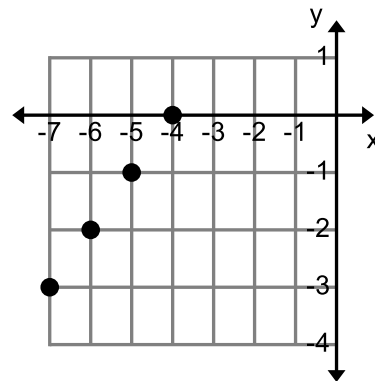| x	f(x)
3	-8
4	-26
5	-44

Recursive:

Explicit:

16.
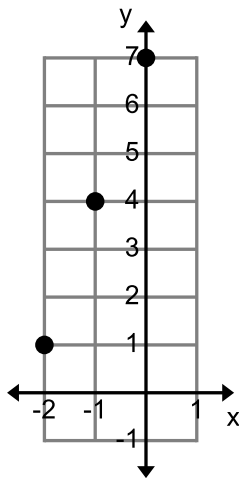
Recursive:
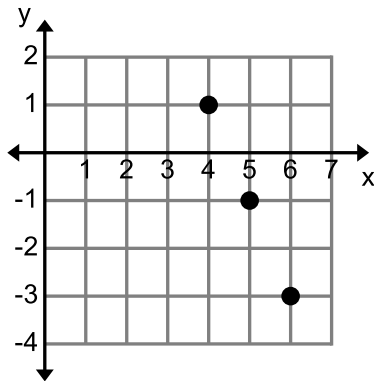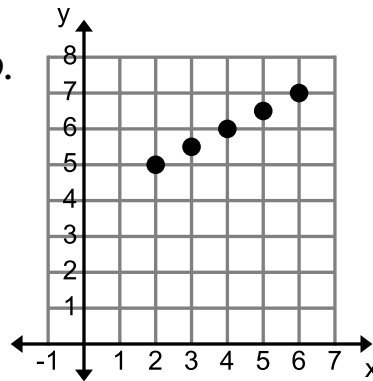
Explicit:

18.

Recursive:

Explicit:

17.

Recursive:

Explicit:

19.

Recursive:

Explicit: