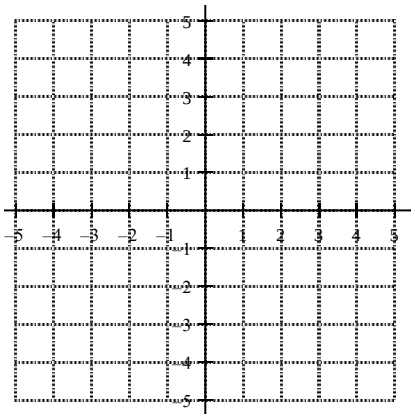
Test C Function Notation and Arithmetic Sequences **Name_____**

i. Given the function find the following coordinates
ii. Graph each coordinate
iii. Determine if the line is increasing or decreasing

1. f(x) = -4x + 3

a) f(1) = **b) f(-2) =** **c) f(x) = 3** **d) f(x) = -1**



2. Complete the table and then answer each question below.

n	0	1	2	3	4	5	6
f(n)	3	8	13	18			

Determine the common difference/slope:_____

Determine the starting value/y-intercept:_____

Determine the function/explicit rule:_____

Determine the recursive rule: _____

3. Complete the table and then answer each question below.

n	1	2	3	4	5	6
f(n)	5	-1	-7			

Determine the common difference/slope:_____

Determine the starting value/y-intercept:_____

Determine the function/explicit rule:_____

Determine the recursive rule: _____

4. For the following arithmetic sequence complete the table and then answer each question.

n	0	1	2	3	4	5	6
f(n)	1			19			

Determine the common difference/slope:_____

Determine the starting value/y-intercept:_____

Determine the function/explicit rule:_____

Determine the recursive rule: _____

5. Given the function rule, make a table for the values

a. f(x) = -5x + 2

x	f(x)
0	
1	
2	
3	
4	

b. f(x) = 6x + 1

x	f(x)
-3	
-1	
1	
3	

6. Given the recursive rule, find the first 5 terms of the sequence

a. $a_n = a_{n-1} - 3 \quad a_0 = 5$

b. $a_n = a_{n-1} + 3 \quad a_0 = -4$