Name_____ Date _____Period_____

ACTIVITY SHEET 3-8

1. A sequence of numbers was generated using the rule 3n-2, where n represents a numbers position in the sequence. Which sequence fits this rule?

A 2, 3, 4, 5, 6, …

B 1, 4, 7, 10, 13,…

C 5, 8, 11, 14, 17,…

D 1, 2, 3, 4, 5,…

2. Write an expression for the nth term of each sequence. The variable n represents the number of the term, such as 1st, 2nd, 3rd, and so on.

0, 3, 6, 9, 12,…_____ 1, 3, 5, 7, 9, 11,…_____

1, 4, 9, 16, 25,…_____ 7, 12, 17, 22, 27,…_____

1, 8, 27, 64,125,…_____ 4, 7, 12, 19, 28, …_____

3. Which expression can be used to find the nth term in the following arithmetic sequence, where n represents a numbers position in the sequence?

Position in Sequence	1	2	3	4	n
Term	5	7	9	11	?

A 5n
B 3n + 1
C 2n + 3
D 3n – 1

4. What is the rule for the following sequence? _____

Position in Sequence	1	2	3	4	n
Term	4	7	10	13	?

5. Which equation describes the data in the table?

a	2	4	6	8	10
b	0	1	2	3	4

A. $b = 1/2\,a - 1$

B. $b = a - 2$

C. $b = 2a - 6$

D. $b = 2a - 3$