Day 1: Sequences   **Name:** _____

Practice Assignment   **Block:** _____

For the following sequences, identify the type, create the explicit formula. Then find the stated nth term.

1.   -10, -4, 2, 8, 14, …   Formula: Find a_{26} =

2.   4, 5, 6.25, …   Formula: Find a_9

3.   3, 6, 12, …   Formula: Find a_{10}

4.   12, 8, 4, 0….   Formula: Find a_{31} =

5.   6, 11, 16, …   Formula   Find a_{42} =

6.   5, -25, 125, …   Formula: Find a_8 =

7.   36, 31, 26, 21, …   Formula: Find a_{17} =

For the given information, generate the first five terms:

8. $a_n = 3(2)^{n-1}$

9. $a_n = 5n + 1$

10. $a_n = 5(-2)^{n-1}$

11. $a_n = -7n - 8$

12. $a_n = 12(1/4)^{n-1}$

13. $a_n = 6n$

For the given information, use it to create an explicit rule.

14. Geometric: $a_4 = 16$, $r = 2$ 15. Geometric: $a_5 = -64$, $r = 4$ 16. Arithmetic: $a_8 = 36$, $d = 2$

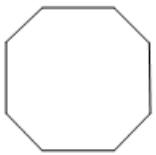17. Count the number of lines creating each figure and answer the questions below:
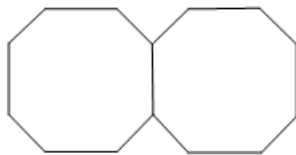

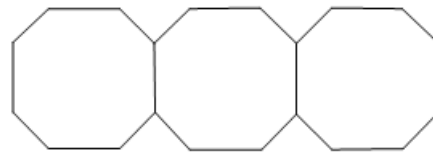Fig 1   Fig 2   Fig 3

Complete the table below:

Fig #	1	2	3	4	5
# of lines					

a. Write the **EXPLICIT** rule for the number of lines needed to generate each shape.

b. How many lines would be used to create figure #20?