Algebra 2B Name:
Section 12-1 Date:

**Homework**

***Intro to Sequences Worksheet***

I. Find the first 5 terms of each sequence.

1) $a\_{n}=-3n^{2}$ 2) $a\_{n}=4^{n-1}$ 3) $a\_{n}=\frac{a\_{n-1}}{5}, a\_{1}=500$

4) $a\_{n}=1.5a\_{n-1}-2, a\_{1}=4$ 5) $a\_{n}=2n^{2}-12$

II. Write a possible explicit rule for the *n*th term of each sequence.

6) $25, 15, 5, -5, -15, …$ 7) 2, 8, 18, 32, 50, ...

8) 5, 0.5, 0.05, 0.005, ...

III. Complete the application problem.

9) Chairs for an orchestra are positioned in a curved form with the conductor at the center. The front row has 16 chairs, and each successive row has 4 more chairs. Graph the sequence and describe its pattern. How many chairs are in the 6th row?