#91

Name_____ Date_____

8A Period_____

Homework Day 1

#'s 1-3: Write a rule to describe each sequence. Then find the next three terms in the sequence.

1) 800, 400, 200, 100, . . .

2) $1, \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots$

3) 80, 50, 20, -10, . . .

#'s 4 & 5: Identify the common difference in each arithmetic sequence.

4) 11, 15, 19, 23, . . .

5) 20, 12, 4, -4, . . .

#'s 6 & 7: Identify the common ratio in each geometric sequence.

6) 750, 75, 7.5, 0.75, . . .

7) 3, 6, 12, 24, . . .

#'s 8-10: Identify each sequence as *arithmetic, geometric* or *neither*. Then find the next three terms of the sequence.

8) 2.0, 2.3, 2.6, 2.9, . . .

9) 21, 15, 9, 3, . . .

10) 2, 1, 0.5, 0.25, . . .

#'s 11-13: Tell whether each situation produces an *arithmetic sequence*, a *geometric sequence*, or *neither*.

11) The temperature falls at the rate of 0.5 degrees per hour

12) The number of bacteria in a lake doubles every day

13) A baby gains 2 oz every day.