Math 200 - Quiz 2

Name _____

February 9, 2011

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (2 points) What kind of sequence is defined in the following table? Find a formula for the nth term of the sequence.

n	nth term
1	5
2	10
3	20
4	40
5	80

2. (1 point) What does it mean for a sequence to be defined recursively?

3. (1 point) Find the next term in the following sequence.

$$4, 6, 13, 25, 42, \ldots$$

4. (1 point) A sequence is defined as follows:

$$A_1 = 5 \quad \text{and} \quad A_n = n + A_{n-1} \text{ for } n = 2, 3, 4, \ldots$$

Find A_3.