Math 200 - Quiz 2

Name _____

September 8, 2010

Score _____

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

1. (1 point) Find the sum: $13 + 14 + 15 + \cdots + 119$

2. (2 points) Find five terms that continue the following arithmetic sequence. Then find the 3142nd term.

$$2, 6, 10, 14, 18, 22, \ldots$$

3. (1 point) Use a counterexample to disprove the following conjecture.

$$(x + 5)^2 = x^2 + 25 \text{ for any real number } x$$

4. (1 point) How many terms are in the following sum?

$$22 + 25 + 28 + 31 + \cdots + 610$$

5. (1 pt ex cred) Compute the sum in Problem 4.