

# Math 1303 - Math in the Liberal Arts

## Quiz #4 - 2008.02.04

### Solutions

---

1. Determine if the following sequence is arithmetic or geometric. State your reasons why.

$$4, 17, 30, 43, 56, 69, \dots$$

Each of the terms in the above sequence differ by a common factor of 13. Therefore the sequence is an arithmetic sequence.

2. Write a formula for the  $n$ th term in sequence given above.

$$a_n = 4 + 13(n - 1)$$

3. What is the 1001st term in the sequence?

$$a_{1001} = 4 + 13(1001 - 1) = 4 + 13000 = 13004$$