

Mathematical Applications

February 17th, 2010

Create your Test

You will create your own test for this cycle. I will choose questions from each of the classes and that will become your test. If your question is used you automatically get that question correct plus get a bonus of 10 points on your test. If a question appears on more than 2 people's paper that question will not be considered for the test and no points will be given, so make sure to do your own work and try to be creative in your questions.

- 1) Create two arithmetic sequences...each of the following parts must be answered for each sequence.
 - a. Create a sequence that contains at least the first 5 terms
 - b. For your sequence state the recursive formula and use that formula to find the next 3 terms to verify that your formula works.
 - c. For your sequence state the explicit formula and use that formula to find the 5th term in the sequence to make sure it works, then use the formula to find the 32nd term.
- 2) Create two geometric sequences...each of the following parts must be answered for each sequence.
 - a. Create a sequence that contains at least the first 5 terms
 - b. For your sequence state the recursive formula and use that formula to find the next 3 terms to verify that your formula works.
 - c. For your sequence state the explicit formula and use that formula to find the 5th term in the sequence to make sure it works, then use the formula to find the 15nd term.
- 3) Create your own word problem; this problem can be a arithmetic or geometric sequence. Be creative. The problem should be a realistic problem that could be related to your trade or anything you might see out in the world. Remember patterns are everywhere. If you cannot think of one look through the book for examples and modify one to fit your situation. If the problem is too close to one that is in the book however it will not be considered for the test. The following parts must be included.
 - a. The word problem
 - b. Each question must include at least three parts to answer.
 - c. For each part you have to give me that answer you are looking for.