

The Grapes of Math

Chapter 12

due: _____

You are going to create a *Grapes of Math* by Greg Tang style book for the material in chapter 12. The topics that you need to cover are:

Arithmetic sequence, arithmetic series, geometric sequence, geometric series, limit of rational expressions, sum of Infinite series, comparison test, ratio test, sigma notation, & binomial expansions.

In each of the above topics, you may choose what about it you want to cover, because each of them has sub-topics (or multiple formulas). You might want to pick a sub-topic that gives you problems or you need to review.

You need to design ten pages of your book with a fancy poem of some kind giving a hint on how to do the problem in a different way, an illustration, and then an answer key (either on the same page or in the back of the book) explaining how to get the answer and if there is a “secret” or better way to look at the problem. Using clipart for illustrations is acceptable.

Below is an example of an answer page:



ANSWERS

FISH SCHOOL
Instead of seeing the fish in rows, look along the diagonal and you will see 4 groups of 4 fish, or 16 fish.
 $4 + 4 + 4 + 4 = 16$

THE GRAPES OF MATH
When possible, add numbers that have easy sums. The grapes can be matched to create 5 pairs which each total 10, so there are 50 grapes altogether.
 $10 + 10 + 10 + 10 + 10 = 50$

You will be graded using the attached rubric.