

Calculus Final Project

Possible Objectives:

- To explore a math-related topic and enjoy learning
- To review and solidify your knowledge of the topics of this class
- To apply a mathematical concept to another area of study

Some Suggestions:

- Read a book/article about a math-related topic and/or thoroughly research a math-related topic (perfect numbers, relativity, chaos theory, infinity, non-Euclidean geometry, cryptography, string theory, e, math education in another culture, math and gender, math in music) and give an oral report with an engaging powerpoint presentation or video
- Plan and give a lesson on a topic not yet covered in this class (arc length, trigonometric substitution, partial fractions, Taylor Series, Newton's Method)
- View a Ted Talk or listen to a podcast series on a math related topic, do some follow up research, and present the information to the class.
- Research the history of calculus, or a mathematician of particular interest to you (Newton, Leibniz, Einstein, Reimann, Noether, Ramanujan, Chukwu, etc.) and present an engaging powerpoint to share your research with the class
- Research an advanced math topic (fractals, topology) and create a bulletin board display
- Create a book or a game that displays the most important concepts from this class
- Write a collection of poems or songs about mathematics

Grading Rubric:

- ✓ 10 points - Submit a **typed project proposal by Friday, March 8th**, complete with topic, format for your presentation, and sources you will use. (**Final Projects will be presented on May 20th or 22rd**)
- ✓ 10 points - Well-organized, neat presentation
- ✓ 10 points - Creative, engaging presentation
- ✓ 10 points - Demonstrates learning has occurred
- ✓ 10 points - Well-researched, uses numerous sources
- ✓ 10 points - Makes a strong connection to a mathematical concept
- ✓ 10 points - Shows project is of interest to student and has fun