## Math 111 - Project 1 Topics

Choose one of the topics below. You will need to research that topic, and then write an article discussing your topic. The article should be 500 - 1000 words and should be written in a style like a science article in a newspaper or magazine. Try to make your topic seem exciting and interesting. If you want to include humor, feel free to do so, but it is not required. Your grade will be determined by the following factors:

- Accuracy all facts should be accurately stated.
- Information content include details, mathematics, and interesting facts.
- Quality of writing try to make your article readable. Use complete sentences, and correct grammar.
- You must include at least 3 sources, only one of which may be Wikipedia.

Below is a list of suggested topics. You are welcome to suggest your own topic, but it must be something mentioned in the book *Zero* and it must have some mathematical content. Check with me if you have an idea.

- Babylonian Numerals Explain how Babylonian numerals are used. Give examples, and also discuss their history, and who actually used them.
- Egyptian Fractions How did the Ancient Egyptians write fractions? How were their methods different from ours?
- History of Our Calendar The Calendar we use today has evolved over time. Talk about its history, and explain why changes have been made in the past. Topics to mention include but are not limited to the Julian Calendar, Dionysius Exiguus, the Gregorian calendar, etc.
- Archimedes Who was he? What were his greatest accomplishments in mathematics?
- The Solar System Describe how our models of the solar system have changed from Ptolemy, through Copernicus, to Kepler and Newton
- Zeno's Paradox Describe Zeno's paradox and what he thought that it proved. Explain how some infinite series actually have finite sums, and how that fact resolves the paradox.
- The Calculus Who invented it? What can it do? Be sure to give some examples of derivatives and integrals.