## Research Paper Requirements

This is a 350-500 word paper requiring at least one picture where you will:

- 1. introduce an individual (that was born before 1900AD),
- 2. explain one of the geometry/math problems that s/he worked on, and
- 3. identify what tools were used to try to answer their question of interest.

In addition to providing the details of your historical figure's life, you should provide an appropriate amount of historical context. This historical context should help explain why your figure was investigating their mathematical problem as well as to explain why they used the tools they did.

Be sure to describe the particular geometry/math problem *clearly*. Your description needs to be as precise and as clear as was expected in the Patty Paper Worksheets and Origami directions. You may want to include diagrams and pictures to help clarify your description of the problem.

You can choose any historical figure who was born before 1900AD, but the individual you choose must have made use of mathematics to solve a problem. Below are a few historical individuals that you might consider choosing:

- Carl Gauss & finding Ceres (Germany)
- Newton & bodies in orbit (England)
- Leonardo d Vinci & architecture (Italy)
- Thabit ibn Qurra & sundials (Iraq)
- Eratosthenes & shape of earth (Greece)
  G.H. Hardy & math analysis (England)
- Georg Cantor & sets (German)
- Srinivesa Ramanujan & numbers (India)
- Bertrand Russel & Alfred Whitehead & mathematical truths (England)
- An author of a Sangako in a Japanese Shinto temple (Japan)
- a mathematician in the Mayan Civilization & astrology (central America)

To write this paper you will have to research outside of class (don't forget what you learned in your Core Lab!). A minimum of two references from well respected sources must be collected and cited. Well respected can mean a published book or an article in an academic (or peer reviewed) publication. Well respected *does not mean* Wikipedia, Answers.com, or hearsay. You are welcome to use cites such as Wikipedia to *find* appropriate sources, but you should not use information that you cannot verify with a respected source.

This paper is to be typed, double-spaced in size 12 Times New Roman or Computer Modern font with one inch margins. Your name and class name should appear on the top left with the title of your paper centered on the next line. Sources are to be cited using IEEE standards and the references should be listed on a separate page. A sample paper providing IEEE examples and additional links to IEEE resources is posted on the class website and can be browsed to from: (http://faculty.washington.edu/rvanderp/).

## Time Table:

Week	Date	Due:
5	Feb. 2 Wed.	clarifying question turned in
6	Feb. 7 Mon.	journal entry from $1/31$
	Feb. 9 Wed.	list of two sources for paper 1 in IEEE format
		bring first draft of paper 1 to class
7	Feb 16 Wed.	final copy of paper 1 due