History Project

1 Purpose:

This project provides you with:

- practice researching a topic,
- more (although specialized) historical context for mathematics,
- an introduction into writing an abstract, and
- further experience working with CSE style.

2 Summary:

This is a project where you will compose a 350-500 word literature review in which you:

- 1. introduce an individual (that was born before 1800AD),
- 2. explain one of the geometry/math problems that s/he worked on, and
- 3. identify what tools were used to try to answer her/his question of interest.

You can choose any historical figure who was born before 1800AD (*besides Pythagorus!!*), but the individual you choose must have made use of or investigated mathematics. In addition to providing interesting 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 his/her particular mathematical problem as well as to explain why s/he used the tools that s/he did.

Be sure to describe the particular geometry/math problem *clearly* (remember your technical communication skills that you've been perfecting!). Your description must 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 *are not* required to explain the solution to the problem, but you *are* required to describe what tools/approach your mathematician used when working on it.)

To write this paper you will have to research outside of class. 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, class websites, 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. The librarians have set up a cite that may be the best starting place for your research: http://libguides.tacoma.washington.edu/math. Additionally the following three books have been placed on reserve and are available for two hour periods from the circulation desk:

- 1. Struik D. A Concise History of Mathematics. (NY): Dover; 1967.
- 2. Berlinghoff B, Gouvêa F. Math through the ages: a gentle history for teachers and others. Farmington (ME): Mathematical Association of America; 2004.
- 3. Bell ET. Men of Mathematics. (NY): Simon and Schuster; 1937.

2.1 Literature Review

In general, a literature review discusses published information in a particular subject area and sometimes information in a particular subject area within a certain time period. A literature review requires both summary and synthesis. A summary is a recap of the important information of the source, but a synthesis is a re-organization, or reshuffling of that information. It might give a new interpretations of the material or combine new with old interpretations. Or it might trace the intellectual progression of the field, including major debates. While the main focus of an academic research paper is to support your own argument, the focus of a literature review is to summary and synthesize the argument and ideas of others. I will not want your opinion.

2.2 Style

Since this is an "Introduction to Science" course you will make use of the *Modified* CSE writing and style used heavily by Biologists, Geoscientists, Physicists, and Chemists.

The UWT library has quite a few CSE specific tools available at http://libguides. tacoma.uw.edu/citations (accessible through the main library page, "Citation Tools/Refworks" link). Posted on this cite is an easy to read summary of in-text and reference page examples created by UWT (http://lgdata.s3-website-us-east-1.amazonaws.com/docs/ 728/558106/Modified_CSE_Style_Guide_draft_3.pdf). Another possible source for Modified CSE information is the University of North Carolina (http://www.lib.unc.edu/instruct/ citations/index.html?page=cbe).

In addition to using CSE style for citations, Biologists, Geoscientists, Physicists, and Chemists write abstracts for all of their papers. An abstract, centered at the top of the page and no longer than 50 words must be included in your final draft.

3 Time Table:

Week	Date	Due:
6	May 7 Tue.	journal entry from $4/30$
	May 9 Thur.	first draft including 2 respected sources cited
7	May 16 Thur.	final draft