

Math 193 History Project

Fall 2014

Objectives: One of the purposes of this project is to give students experience reading and understanding material that includes mathematics. Another purpose is to give students experience writing and talking about subjects that include mathematics. A third purpose is to give students experience working in a small group on a major project spanning several months.

General Directions: Students will work in groups of three. Each group will pick a different scientist or mathematician to research. After researching that person, the group will make a presentation to the class and write an essay about that person.

Research: Work together to thoroughly research the scientist/mathematician. Keep track of your sources; you will eventually need to make a list of sources for your essay and presentation. Wikipedia is a great starting point, but it is not a reliable source. You can usually find a list of reliable sources at the bottom of Wikipedia articles. Use these guidelines to help guide your search.

- Find Basics Info: Birth, death, where they lived, just basic stuff.
- What was happening in the world when they were alive? Wars, major politics, droughts, volcanic eruptions, general technology, major disease outbreaks, etc.
- What was happening in Math and Science when they were alive? Was major new technology developed, what was in “fashion” in research, were there any new theories developed, was there a major question that was being grappled with, were there any scientific arguments going on, etc.
- What was their life like? Were they married, did they have kids, did they move around a lot, what was their drug of choice, did they have arguments with anyone, were there other scientists that they liked or hated, etc. Think of this one as a gossip column.
- What were their major contributions in mathematics and/or science?

Going Further: Once you and your group have done your research (make sure you share info so that everyone is up to speed), you need to use it to answer some questions. You will need to pick at least 2 of the following questions to answer. You will base your presentation and your essay on them.

1. How did the state of the world at the time of the scientist’s life influence their work?
2. How did the science/mathematics climate of the time influence the scientist’s work?
3. How did the scientist’s life circumstances influence their work?

4. If the scientist had not lived, and their work therefore not been done, how would our world be different?
5. How has the scientist's work influenced our daily lives?
6. In your opinion, is the world better or worse off as a result of the scientist's work? Why?

Presentation: As a group, you will make a presentation to the class in which you share your answers to the questions. Your presentations should be between 5 and 10 minutes long. You will need some visual aids. Those can be in the form of a PowerPoint presentation, using the white board, or giving out a handout. You are also welcome to get more creative than that.

Essay: Your group will put together an essay to answer your questions. You should make sure to include enough background information to give the reader a good idea of who this person was, but not so much that you don't adequately answer your questions. This is an essay, not a research paper. Your final essay should be between three and five pages long, single spaced, 12 point font, with 1 inch margins. You will turn in several drafts before the final version.