

Stillwell's book, and, to a lesser extent, Hartshorne's and Cederburg's books, include discussions of the historical developments in geometry as a context for the mathematics of geometry.

Question for discussion: What is the value of a historical perspective in mathematics?

Assignment:

- Choose a mathematician, e.g. one mentioned in the historical commentary or the references of one of our texts, who made a significant mathematical contribution to geometry.
- Research the mathematician's life and work, by consulting at least two published sources outside of the sources we are using in the class.
- You may consult Wikipedia and other websites, and you ought to reference them if you consult them, but they do not count towards your two published outside sources.
- Write a short (2-4 page) paper highlighting the mathematician's contributions to geometry. This paper should include some biographical information, but the focus should be exposition of the relevant mathematics.
- Use a word processor (like Microsoft Word) or software for mathematical typesetting (like Mathematica or LaTeX).

Timeline:

- Proposal due Jan 18: submit a one-paragraph written proposal, describing the mathematician's contribution to geometry, and including references for two published outside sources.
- Paper due Feb 8: final draft of paper due.
- If you would like me to read a draft of your paper before Feb 8, I would be happy to do so. Please contact me to set up a time to meet, and submit the draft at least 48 hours before the meeting.

Evaluation: I will evaluate the paper based on the clarity of the writing, the correctness and depth of the mathematics, and the quality of your presentation.