

## Guidelines for Geometry Project Write-up Math 101, Spring 2004

Your assignment is to write a concise, well-written paper that conveys the results of your project. There should be just enough detail to show exactly what you did. For instance, if your project involves a geometric proof, it is enough to outline the major ideas, rather than explain every small step. It might be appropriate to attach an appendix, where you can show that you have detailed calculations or proofs without letting them interrupt the flow of your narrative.

Here's how to think about your audience: Write in such a way that your work will be easily understood by others in our class, or by you, as you were before you studied this topic. I imagine you running across this paper ten years from now and being fascinated by how clearly you have explained the wonderful work you did.

**Basic requirements:** 1) You **must** have a self-contained introduction that explains the basics of the problem you investigated, with a brief overview of what you found. *Self-contained* means that a person should be able to read *only* this part of the paper and get a good feeling for what you accomplished in your project. 2) Even if you worked with a partner, you must write your own paper. It is probably safest to write your paper in isolation, without even seeing what your partner has done. 3) **If** you were allowed to use any outside sources (most people were not), you must credit them in your paper. Use the bibliographic format and style of references as in *Mathematics Magazine*; you can look in any issue for examples, or read the editorial guidelines, posted at <http://www.maa.org/pubs/mathmag.html> .

In the body of your paper, explain the results of your inquiry. Say what it was you discovered and present all the evidence that your discovery is true. If you have a lot of detailed computations, you may wish to locate these in an appendix, so that the body of the paper is easier to read. If you can break the body into sections with labeled section-headers, it will help readers to navigate your paper.

In a concluding section, summarize your results. You may wish to talk about aspects of the problem that you did not have time to solve, or tell any interesting stories you have about your process, including information about false starts, technological problems, common misconceptions, etc.

**Deadlines:** A draft of your paper should be submitted electronically, as an attachment to email, with a final cut-off of time of 10 AM, Tuesday, June 8. (If you can send this earlier, I will process your work earlier.) I should be able to return this to you, with corrections, by the afternoon of June 9. The absolute deadline for a final draft is noon on Thursday, June 10.

For advice on writing mathematics, you may wish to read my essay on the topic, posted at our course website in PDF format.