

Math 512 Final

This final is a chance to reflect on your learning in this class. You should put serious thought into each of these questions; if you use less than three pages, you probably need to spend more time carefully considering one or more of the questions. I will use it to determine your course grade by considering your problem set portfolio; how thorough, detailed, and thoughtful your responses are here; and my professional judgement.

1. **What mathematical ideas are you curious to know more about as a result of taking this class?** Give one example of a question about the material that you'd like to explore further, and describe why this is an interesting question to you.
2. **What ideas from this class have come up in other areas of math you have studied?** This could be within another class you are or have taken, or in beginning work on your thesis. Give as many examples as you can.
3. **Take one topic you have worked on this semester that you struggled to fully understand, and explain how the struggle itself was valuable.** In the context of this question, describe the struggle and how you overcame the struggle. You might also discuss whether struggling built aspects of character in you (e.g. endurance, self-confidence, competence to solve new problems) and how these virtues might benefit you in later ventures.
4. **What is one thing you have learned in this class that was not reflected in the problem sets?** Explain this idea in detail; what is it, and how does it work? How does it connect to the other topics we have discussed in this class? Why did this stand out to you as interesting or important?
5. **Mathematics is an inherently collaborative endeavor. Discuss how you have improved in your ability to do so over the course of the semester.** You might wish to describe particular problems you worked on, or particularly memorable moments of collaboration with your classmates, either inside or outside of class.
6. **Based on the work you have done all semester and the stated goals for the course, what grade do you think you have earned?** What evidence of your learning have you accumulated over the semester? This could include the problem sets, a description of how you have helped your classmates learn, and/or additional evidence of your understanding of particular topics that may not have been adequately captured on formal assessments. Use this space to share anything that will help me assign a course grade that reflects how much you have learned in this course.