

Instructions:

- Choose **one** of the following projects that will count as your final exam grade.
- Your project should be turned in to me (via email or math department mailbox) by 11:30am Monday, May 4 (the end of your scheduled final exam time); -20% if turned in by 5pm that day, automatic 0 if not turned in by 5pm. You may turn it in earlier, of course.
- Your final work should be neat and typed with appropriate graphs, tables or charts (if needed.)
- If you are asked to calculate something, explain how you calculated it, or state what formula you are using. If you are using an online calculator, be sure to cite it.
- Cite all sources you use in the same way as the mini-project: list websites, date accessed, and for what purpose.
- All papers will be checked for plagiarism. If your paper is too similar to another student's or is plagiarized, you will receive a zero and will be referred to the Office of Academic Integrity.

Project Options:

Each of the case studies can be found on the course webpage.

No matter which option you choose you must:

- Write a paragraph (about a page in length) describing the case study, what you found interesting about it, what resources you found helpful, any difficulties you experienced and how they were resolved or not.
1. **Financial Mathematics:** Read Example 7 on page 152. Read the case study that begins on page 160 at the end of Chapter 2. Then answer questions 1-5. You should include the excel sheets you made when turning in your project.
 2. **Counting:** Read the case study that begins on page 443 and answer questions 1-4.
 3. **Probability:** Read pages 495-499. Read the case study that begins on page 539 and answer questions 1-4.
 4. **Graph Theory:** Read the handout posted on the course webpage and answer the questions. You should include your colorings with your project (this may mean you need to turn in a hard copy of your project).