## Math 532:Final Project Due 12/18/19

## **Project Description**

In groups of 3-4 students, develop three homework problems. Provide complete solutions. Worked examples from books are fine to use, but make sure to present all necessary background material so that the presentation is self-contained. Said another way, I, the reader, should not have to look anything up in order to follow your solution.

## **Grading Criteria**

Each project will be graded out of 100 points with

- 50 points for meeting the basic requirements in the project description.
- 25 points for grammar, style, and quality of presentation.
- 25 points for technical merit, difficulty, or overall cleverness.

## Resources

The following texts might be useful to you, though feel free to use any book that seems suitable to you.

- Basic Complex Analysis by J. Marsden.
- Complex Variables by M. Ablowitz and A. Fokas
- A Course of Modern Analysis by E.T. Whittaker and G.N. Watson
- Analytic Combinatorics by P. Flajolet and R. Sedgewick
- Introduction to Analytic Number Theory by T. Apostol