

Homework Guide

Math 301 Fall 2023

Structure and Schedule

There will be a homework assignment assigned every Wednesday that will be due the following Wednesday in class (unless otherwise specified). You should complete or attempt the bulk of the assignment by Monday, so we can discuss any issues that arise before Wednesday (either in office hours or in class if time permits).

The assignment will consist of three types of problems: exercises marked with *, exercises marked with **, and unmarked exercises.

- **You will write-up and turn in solutions to the problems marked with *.**
- The problems marked with ** are meant to be viewed as “challenge” problems. This does not mean they are necessarily very difficult, but it means that I thought they were good problems, and I had to think about them for at least 5 minutes before having a good idea of what I’m supposed to do. **If you are planning to do more higher-level math, you should spend time working on these problems.**
- Most of the problems on the exams will be either directly lifted from the homework or be closely based on a homework problem. **So, you should work through all the problems in order to be prepared for exams.**

Expectations

You may discuss homework problems with your peers (or me), but the work you turn in must be entirely your own. There is a big difference between discussing and working on a problem with someone and writing the same exact solution. I should never see identical work. In case, your work is too close to a peer’s work or a solution on the internet, I will ask you come to my office to give an oral presentation.

A portion of the problems will be computational in nature, but most of the exercises will require a formal proof. **Proofs should be written in a clear logical fashion with complete sentences.** Standard logical symbols are permitted, but they cannot entirely replace the written word. You should use my style as a guide.

Grading

For each assignment, I will grade a single problem out of the problems marked * (you will not be told ahead of time which problem I will grade). This problem will be graded out of 4 points using the rubric below.

Point Value	Letter Grade Equivalent	Qualifier
4	A	Complete, correct, and easy-to-follow solution (usually a complete proof is required). May contain a minor error.
3	B	Viable strategy present and understanding of problem is clear, but execution is incomplete; or correct argument present, but significant writing issue in presentation
2	C	Attempt shows an understanding of problem and understanding of material, but has not presented enough of a viable argument
1	D	No viable argument, but some indication of a serious attempt. Possibly providing an example exhibiting understanding of the problem.
0	F	No serious attempt presented or a severe lack of understanding of the problem.