

MATH 3032: Abstract Algebra

Assignment 4

due 14 March 2023, end of day

Homework should be submitted as a single PDF attachment to `theojf@dal.ca`. Please be sure to include your surname in the file name.

You are encouraged to work with your classmates, but your writing should be your own. If you do work with other people, please acknowledge (by name) whom you worked with.

Remember that all answers should be justified unless otherwise stated.

1. Pick a question, theorem, or example from this class that you had to think about for a while before you understood it. Now go to <https://chat.openai.com/chat> and ask ChatGPT your question. It will probably get the answer wrong — ChatGPT is merely a language model, with limited understanding of logic and no understanding of mathematical abstraction. (For example, when I gave ChatGPT the midterm exam, it got around the F/D cutoff.) Have a conversation with ChatGPT in which you point out its errors and, if possible, figure out what ChatGPT was thinking about that led it to its wrong statements. Send me the transcript of your conversation.