

Math 418: HW 3 due Wednesday, February 9, 2022.

Webpage: <http://dunfield.info/418>

Office hours: Monday and Tuesday from 1:30–2:30pm; other times possible by appointment.

Homework solutions: Partial solutions for graded homework assignments are posted on the course webpage.

Course gradebook: There is a link for this on the course webpage for if you want to check your scores at any point.

All problems are from Dummit and Foote, *Abstract Algebra*, 3rd edition.

1. For the next part of the course, I will be assuming familiarity with linear algebra over arbitrary fields, in particular the contents of Sections 11.1 and 11.2 of the text. Review those sections, and work a problem from them of your choice.
2. Section 9.4 #10.
3. Section 13.1 #2.
4. Section 13.1 #8.
5. Section 13.2 #7.
6. Section 13.2 #14.