

Math 418: Problem Set 3.

Due date: In class on Wednesday, February 10.

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

Office hours: Monday 10-11, Tuesday 3-5.

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.