Math 611 Homework 7

Due Sunday, November 10, 2023 to Gradescope (by 11:59 pm)

The problem numbers below refer to Dummit and Foote, third edition.

Homework policies:

- 1. Homeworks will vary in length from 10 20 problems, depending on length and difficulty of the problems. A subset of the problems will be graded for correctness.
- 2. You can neatly handwrite or type your homework, and do not need to copy the problem statement. Please clearly label each problem with its number/part.
- 3. You may use any result from a previous section of the textbook or previous homework assignment. Please indicate that you have done so (e.g. 'by Proposition 2 in §1.1, part (2) ... ' or 'by Homework 2, Problem 4...').
- 4. If you collaborate with others, please write their names at the top of your assignment.
- 5. For most homework assignments, I will include 1 2 sample qualifying exam problems related to the content of the assignment. You *do not* have to complete these problems or turn them in, but they are good indications of your mastery of the material.

Assigned problems:

- §7.1: 5, 7, 8, 13, 14, 23, 26
- §7.2: 2, 3, 7 (you may assume (6))