

## Homework Exercises

**Instructions for writing up homework.**

- Although you are encouraged to work with your classmates on the homework assignments, you must write up the solutions individually.
- Read the section!
- Use pen or non-smeary pencil. Do not have little scritchies on the side.
- Staple your homework.
- Write legibly, and leave lots of whitespace. Make sure your writing is dark enough to be readable. If this is problematic for you, consider typing your homework.
- Answer the question in complete sentences, where appropriate.
- **Write the problem statements as well as the answers.** This is not optional. Points will be deducted if you do not do this.
- Have headings indicating the section.
- **In the upper right hand corner of your top page**, write your name (first and last) on your assignment, along with the course number (Math 307) and which assignment it is.
- **You are expected to ask questions in class about the homework problems!**

## HOMEWORK SET 7

**DUE Friday, March 12 at the beginning of class.** No late homework, especially this week. You should read each section!

**Section 6.3.** Think about, but do not turn in: 1, 3c, 7, 9, 14

To turn in: 2 (provide a labelling proving the isomorphism), 8, 11a

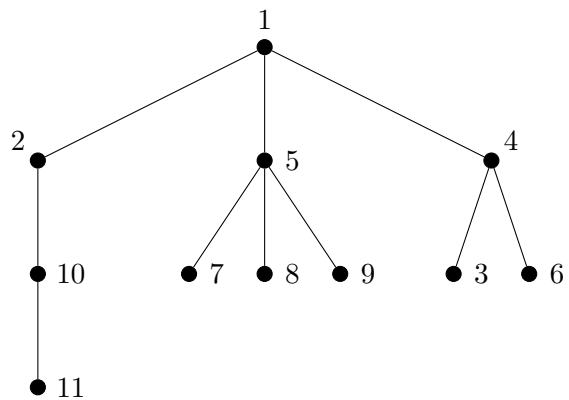
**Section 6.4.** (Also Worksheet on Prüfer Codes, not in your textbook)

Think about, but do not turn in: 1, 3, 5, 7

To turn in: 6, 8, 10, 12

Turn in these additional:

- (1) Draw a tree with Prüfer code  $(5, 2, 1, 4, 4, 1, 6, 1, 1)$ , with no crossing edges. Show some work.
- (2) Find the Prüfer code of the following tree. Show some work.



**Section 6.5.** Think about, but do not turn in: 3, 7, 9, 10, 13

To turn in: 2, 4, 8

**Section 4.6.** To Turn in: # 8