Math 100a Fall 2015 Homework 9

Due Wednesday 12/2/2015 by 5pm in HW box in basement of AP&M

Reading

All references are to Beachy and Blair, 3rd edition.

Finish reading the sections of Chapter 7 that we will cover: 7.2-7.5, and Theorem 7.1.3 from section 7.1. We will only cover Section 7.5 only lightly.

This homework has a set of problems to be handed in which is relatively short, and some more problems you will do on your own to prepare for the final but will not hand in.

The schedule for the last week is the following: Monday: We will cover Theorem 7.1.3 and applications of the Sylow theorems from Section 7.4. Wednesday: We will talk about the theorems on Abelian groups from 7.5 without giving most of the proofs. Friday: we will talk about the classification of groups of low order; this uses many of the techniques and theorems we have developed to will serve as a kind of review of the main results of the course.

Assigned Problems (write up full solutions and hand in):

Section 7.2 #15
Section 7.3 #6, 11, 13(a)(b)(d), 14(a)

Problems to do on your own before the final (don't hand in)

Section 7.1 #1
Section 7.4 #1, 2, 3, 11