Math 566: Abstract Algebra I
Homework 8

10 points total. Due Friday, October 15 by 11:10 am in class.

Problems

1. (3 points) Chapter 6 exercise 7.11 (Hint: Consider the action of the order 12 subgroup on $\{1, 2, 3, 4\}$ and consider the possible sizes of the orbit and stabilizer of an element.)

2. (2 points) Chapter 6 exercise 7.1

3. (1 point each) Chapter 6 exercises 7.6, 8.1, 8.4, 9.1, 9.2.

Recommended practice exercises

(DO NOT hand these in - these are just extra problems I recommend you look at if you'd like more practice.)

Chapter 6 exercises 7.3, 7.8, 9.3, 9.4.

Bonus

(+1 point): Chapter 6 exercise M7