

## HOMEWORK 2, DUE THURSDAY OCTOBER 12TH

1. Give a description of  $D_4$ , the group of symmetries of the square, similar to the one given in class, and find all of its subgroups.
2. Chapter 2, Section 2: 1 and 2.
3. Chapter 2, Section 3: 4, 5, 8, 12, 19, 20.

**Challenge Problems:** (Just for fun)

4. Chapter 2, Section 3: 25-27.