UH - Math 6302 - Dr. Heier - Fall 2013
HW 3
Due 10/16, at the beginning of class.

Use regular sheets of paper, stapled together.
Don't forget to write your name on page 1.

1. (2 points) Describe the six distinct subgroups of $\mathbb{Z}_4 \times \mathbb{Z}_2 \times \mathbb{Z}_2$ which are isomorphic to $\mathbb{Z}_4 \times \mathbb{Z}_2$. Prove that the six groups on your list are distinct. Note that you do not have to prove that there are no more than six.

2. (2 points) Section 5.2, Problem 1

3. (2 points) Section 5.2, Problem 2

4. (2 points) Section 5.2, Problem 4(c)

5. (2 points) Section 5.5, Problem 2