Math 330 Mid-Term 1 study guide

The first mid-term will be **Wednesday October 3rd**. It will cover Chapters 1 and 2 of the book.

Specific topics will include:

- Euclidean Algorithm
- Greatest common divisors
- Equivalence relations
- Permutations:
    - Cycle decomposition
    - Sign of a permutation
- Axioms for a group
    - Proving simple consequences of the group axioms (e.g. that a left invers is a right inverse)
- Examples of groups, including computations. Abelian groups.
- Orders of elements of a group.
- Matrices

This is not intended to be an exhaustive list!

The best practice for the mid-term is to go over the homework problems, and to try the other problems from the book.