

## Concepts to know (Exam 2)

This exam covers Chapter 3, Chapter 6, and section 7.1

- Setting up a Linear programming problem. Be sure to define the variables.
- Inequalities (Graphing, Shading for the feasible region)
- Bounded, unbounded FR.
- Solving Linear programming problems. ( Graphing method, feasible region, Corner points, How to find a solution. )
- Set notation ( $\subseteq, \subset, \in, U, \emptyset, A^c, \cup, \cap, n(A)$ )
- Subsets and Elements, Translating sets to English, Translating English to sets, Filling in a Venn Diagram, Shading Venn diagrams.
- Counting problems (using Venn Diagrams, Tables, Trees, Multiplication Principle, Combinations and Permutations, Permutations of non-distinct Objects, Counting what you want by counting what you do not want, Union rule.
- Sample space and Events, Outcomes, Mutually exclusive.
- Any additional topic discussed in class.