Concepts to know for Exam 1

This exam covers L1 and chapter 1.

- statements
- compound statements
  - and, or(inclusive), or(exclusive), not
  - symbolic notation translated to english
  - english translated to symbolic notation
  - contradiction
  - tautology
- truth tables
- Set operations: union, intersection, and compliment
- Subsets, proper subsets, and Elements.
- Translating sets to English.
- Translating English to sets.
- disjoint sets
- Venn diagrams
  - Filling in a Venn Diagram
  - Shading Venn diagrams
  - counting with a venn diagram
- union rule for sets/propbability
- Sample space
- Events
- Outcomes
- Mutually exclusive
- probability distribution
- uniform sample space
- Probability using
  - Venn diagrams
  - Trees
  - tables/charts
- Conditional probability
  - Reduced sample space
  - Formula
  - Backwards tree
- Independent Events
  - Test for independence: Two events, A and B, are independent if $P(A \cap B) = P(A)P(B)$
  - Using the concept of independence
- Odds
  - in favor of E
  - against E
- Probability from Odds
- Any additional topic discussed in class.