DISCUSSION PROBLEMS 1

JANUARY 28, 2013

Chapters Covered: 14 and 15.

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<td>14</td>
<td>1, 11, 16, 19, 21, 39</td>
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<td>1, 7, 15, 19, 25, 44, 45</td>
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Think about the above before Thursday and ask about them at your recitation if you have questions. They are not to be handed in. (There will also be a lab activity on Thursday.)

Student Guide: Below are some things to concentrate on in these chapters:

- **Vocabulary:** Outcome, Sample Space, Event, Probability Assignment.
- Inclusion/Exclusion. (The Addition Rule . . .)
- $P(A \cap B) = P(A|B)P(B)$.
- $\cap \leftrightarrow$ and, $\cup \leftrightarrow$ or, $A^c \leftrightarrow$ not $A$.
- Computing simple probabilities
- Idea and computation of conditional probability.
- The definition of independent events.
- Why independent events are completely different from disjoint (i.e. mutually exclusive) events.
- Better understanding of tree diagrams to keep track of probabilities of possibilities in a chain of events.
- Use tree diagrams for reverse conditioning.
  Note $P(A|B) \neq P(B|A)$!
  But with some extra info, we can go from $P(A|B)$ to $P(B|A)$. 