Lecture 3
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This week's exercises are on probability. Your reading for last week gave the basics of counting and probability. An online source for some basics is *http : //www.mathgoodies.com/lessons/vol6/intro_probability.html* and other websites give more advanced material. You can also use google or another search engine on such key words as permutations, combinations, conditional probability, Bayes Theorem to learn more.

Hint on Problem 2.2: C declares that D is a liar is true if and only if C and D have opposite veracity. Affirms that B denies a truth means that A and B have opposite veracity; while A affirms that B denies a falsehood means that A and B have identical veracity. Your job is first to show that that means that there are an even number of truth tellers and an even number of liars.

Since lying is twice as likely as telling the truth, we can count, or make a tree diagram, with 81 possibilities by counting lying as 2 each and telling truth as one each, so TTTT happens once and LLLL happens 16 times (2x2x2x2). Using this idea you can count how many times D tells the truth.

My experience is that students do well on this chapter so I don't have much to say. Should you have a problem, please email me with your question(s).