Problem Set #6

1. A trader either wins or loses $100,000 on each trade, and has the probability of winning at .55. The trader starts with a capital of $1,000,000. What is the probability for that trader of being ruined eventually?

2. Suppose the trader decides to take $200,000 off the table whenever capital exceeds $1,200,000, and spends the money. What then is the probability that that trader will eventually be ruined?

3. Describe the dilemma that a trader is in who is trying to decide how much to leave on the table.

4. Go to Standard & Poors page on the S&P 500 index. From the information there, write a paragraph that describes the risk, return, and sectoral exposure of the index.

5. Go to The American Stock Exchange and click on "SPDR S&P500 (SPY)" and then click on "view prospectus." Read the prospectus and summarize in a paragraph just what an investor in this ETF needs to know.

6. Go to http://www.nymex.com and then click crude oil, and then click "I accept." Then click "view all contract months. For which contract months is there the most open interest? Try to guess why the open interest is so different across contract months. Is the market in contango or backwardation everywhere? Please offer a guess about what is going on in the oil market that produced this pattern.

7. Go to CME Corn contract and click "quotes." Is the contract in backwardation or contango over the whole range of maturities? What might be at work that determine the pattern of futures prices that you see? Is the pattern consistent with a storage model?