Problem Set #8

1. Semitool Corp has an expected excess return of 6% for next year. However for every unexpected 1% change in the market, Semitool's return responds by a factor of 1.2. Suppose it turns out the economy and the stock market do better than expected by 1.5% and Semitool's products experience more rapid growth than anticipated, pushing up the stock price by another 1%. Based on this information what was Semitool's actual excess return?
   A. 7.00%
   B. 8.50%
   C. 8.80%
   D. 9.25%

2. Stock A has a beta of 1.2 and Stock B has a beta of 1. The returns of Stock A are ______ sensitive to changes in the market as the returns of Stock B.
   A. 20% more
   B. slightly more
   C. 20% less
   D. slightly less

3. Which risk can be diversified away as additional securities are added to a portfolio?
   I. Total risk
   II. Systematic risk
   III. Firm specific risk
   A. I only
   B. I and II only
   C. I, II, and III
   D. I and III

4. Which of the following correlation coefficients will produce the most diversification benefits?
   A. -0.6
   B. -0.9
   C. 0.0
   D. 0.4

5. A project has a 60% chance of doubling your investment in one year and a 40% chance of losing half your money. What is the standard deviation of this investment?
   A. 25%
   B. 50%
   C. 62%
   D. 73%