CORPORATE FINANCE FIN 301- 01/02 ASSIGNMENT VIII RISK AND RATES OF RETURN

1. Two stocks i, and j have the following probability distributions:

Probability	$\mathbf{R_{i}}$	$\mathbf{R}_{\mathbf{i}}$
0.20	23%	8%
0.45	8	12
0.35	15	16

Calculate the expected returns, standard deviations, and coefficient of variations for stocks i and j. Which stock would be preferred by the average investor? Explain why in your own words.

- 2. Calculate the return distribution of a portfolio, P constructed of 60% in i and 40% in j.
- 3. Use the probability distribution in question 2 above to calculate the expected return and standard deviation of the portfolio, P.
- 4. Use the expected returns of i and j to calculate the expected return on portfolio, P. Compare the answer in this question to the answer in question 3 above. What do you notice? (If you don't notice anything special, what should you have noticed?)
- 5. Assume that the risk-free interest rate is 3%, the expected return on the market is 8%, the beta of stock i is 1.50, and the beta of stock j is 1.80. Are i and j overpriced, underpriced, or fairly priced? (show your calculations)
- 6. Calculate the beta of portfolio, P. Given the beta of P and the information in question 5 above, is portfolio P overpriced, underpriced, or fairly priced? (show your calculations)