

**Fin 533 Homework**  
**Due Tuesday October 6, 2009**

| Stock | Expected return | Beta | Firm-specific Standard deviation |
|-------|-----------------|------|----------------------------------|
| A     | 13%             | 0.8  | 30%                              |
| B     | 18              | 1.2  | 40                               |

The market index has a standard deviation of 22% and the risk-free rate is 8%.

1. What are the standard deviations of Stocks A and B?
2. Suppose that we were to construct a portfolio with proportions:

| Security | Proportions |
|----------|-------------|
| A        | 30%         |
| B        | 45          |
| T-bills  | 25          |

Compute the expected return, standard deviation, beta, and nonsystematic standard deviation of the portfolio.

3. A share of stock is priced at \$100. It will pay a dividend of \$9 per share at the end of the year. Its beta is 1.25. What do investors expect the stock price will be at the end of the year? Assume a risk-free rate of 8% and a market return of 18%.