**Problem 1**  
Company JUK has a ROE of 25% and the company will not pay any dividend for the next 3 years. It is estimated that the company will pay $2 dividend per share after three years and then to level off to 5% per year forever.

The company has a beta of 2. Assume the risk-free interest rate is 4%, and the market risk premium is 8%.

1. What is your estimate of the fair price of a share of the stock?

2. If the market price of a share is equal to this intrinsic value, what is the P/E ratio?

3. What do you expect its price to be 1 year from now? Is the implied capital gain consistent with your estimate of the dividend yield and the market capitalization rate?

**Problem 2**  
An analyst uses the constant growth model to evaluate a company with the following data for a company:

Leverage ratio (asset/equity): 1.8  
Total asset turnover: 1.5  
Current ratio: 1.8  
Net profit margin: 8%  
Dividend payout ratio: 40%  
Earnings per share in the past year: $0.85  
The required rate on equity: 15%

Based on an analysis, the growth rate of the company will drop by 25 percent per year in the next two years and then keep it afterward. Assume that the company will keep its dividend policy unchanged.

1. Determine the growth rate of the company for each of next three years.

2. Use the multi-period DDM to estimate the intrinsic value of the company’s stock.

3. Suppose after one year, everything else will be unchanged but the required rate on equity will decrease to 14%. What would be your holding period return for the year?