Capital Market Theory Class Problem

Finance 4335

Suppose the annualized risk-free interest rate is 5%, the market portfolio M has an expected return of 9% and variance of 4%. Assume the covariance between an asset i and M is 8%, and that asset i does not pay dividends.

1. What is next year's expected return $E(r_i)$ for asset i, according to the Capital Asset Pricing Model (CAPM)?

2. Suppose analysts expect that asset i will earn an 11% return during next year. Is asset i correctly valued, under-valued, or over-valued? Explain why.

3. Based on the CAPM, what is the "fair" (i.e., equilibrium price) for asset i, given that it's forecasted price one year from now is \$50? Also calculate the price based upon the 11% return expected by analysts.