

5) You are given the following information:

- $k^* = 1\%$
- The inflation rate is expected to be 2.5% per year for the next 2 years, 3% per year for the following 2 years, and 3.5% per year thereafter.
- 5 year U.S. government securities have an interest rate that is 0.2% higher than 4 year U.S. government securities
- The MRP on 5 year securities = 0.4%

What is the MRP on 4 year U.S. government securities?

6) You have the following five investment opportunities expressed in nominal rates of return per year. You will be investing \$10,000 today. Which opportunity will yield the largest amount five years from today? Show how you derive your answer.

- A: 7% compounded annually
- B: 6.881609% compounded semiannually
- C: 6.82341% compounded quarterly
- D: 6.784974% compounded monthly
- E: 6.766492% compounded daily

7) Your aunt has generously offered to pay the college tuition/room and board for your kid sister, who will be starting school today. She will send a check for your sister's freshman year costs directly to the school. For the remaining years, your aunt will deposit money in a savings account today from which your sister can withdraw the required funds one year, two years, and three years from today. The bank pays interest of 2.5% per year, compounded annually. The college's tuition/room and board is \$55,000 for the current year, and is expected to increase by \$2,000 each year for the foreseeable future. How much money does your aunt have to deposit in the bank today? How much will be in the account after your sister makes the second withdrawal two years from today?