Economics 252
Problem Set #4

1. Look in the *Wall Street Journal* at “Dividend News” and choose a company paying a regular dividend.
    a. How frequently does the company pay a regular dividend?
    b. What is the amount of the dividend?
    c. By what date must your stock be registered for you to receive the dividend?
    d. How many weeks later is the dividend paid?
    e. Look up the stock price and calculate the annual yield on the stock.
2. Consider the following two statements: “Dividend policy is irrelevant.” “Stock price is the present value of expected future dividends.” They *sound* contradictory. This question is designed to show that they are fully consistent. The current price of Quinnipiac River Mining Co. is $50. Next year’s earnings and dividends per share are $4 and $2 respectively. Investors expect perpetual growth at 8 percent per year. The expected rate of return demanded by investors is r=percent. We can use the perpetual growth model $P=Div/(r-g)=2/(.12-.08)=50$. Suppose that Quinnipiac River Mining announces that it will switch to a 100 percent payout policy, issuing shares as necessary to finance growth. Use the perpetual growth model to show that the current stock price is unchanged.
3. Companies A and B differ only in their capital structure. A is financed 30 percent debt and 70 percent equity. B is financed 10 percent debt and 90 percent equity. The debt of both companies is risk free.
    a. Mr. X owns 1 percent of the common stock of A. What other investment package would produce identical cash flows for Mr. X?
    b. Mrs. Y owns 2 percent of the common stock of B. What other investment package would produce the identical cash flows for Mrs. Y?
    c. Show that neither Mr. X nor Mrs. Y would invest in the common stock of B if the *total* value of company A were less than that of B.
4. Hubbard’s Pet Foods is financed 80 percent by common stock and 20 percent by bonds. The expected return on the common stock is 12 percent and the rate of interest on the bonds is 6 percent. Assuming that the bonds are default free, draw a graph that shows the expected returns of Hubbard’s common stock r_E and the expected return on the package of common stock and bonds r_A for different debt equity ratios.
5. Log on to the web site of the Securities and Exchange Commission, read the 10-K report of a company that interests you, and describe its balance sheet and how it relates to their recent business, in a few paragraphs. What does the company own and what does it owe? To do this, go to www.sec.gov, and, and then click under "Filing and Forms (Edgar)" "Search for Company Filings." It comes up with "Search the Edgar Database." Click on "Companies and Other Filers." Enter where it says "Company Name" e. g., enter Ford Motor. Then click on the pink number next to the company name. Then, in the upper right corner, enter 10-K into the box where it says "Form Type."