1. You are trying to estimate whether Loomis Textiles, a textile manufacturing firm, should recapitalize itself. You know that the firm has $100 million in debt outstanding (in market value terms) and 90 million shares, trading at $10 per share. The current beta (levered) for the stock is 1.15 and the current pre-tax cost of debt is 6%. The riskless rate is 5.25% and the market risk premium is 4%. The corporate tax rate is 40%.

a. Estimate the current cost of capital. 

b. Now assume that the firm will be borrowing $200 million and buying back stock. If it does so, it is expected that the pre-tax cost of debt will rise to 7%. Estimate the cost of capital if it does move to the optimal.

(1 point)

(2 points)
c. Now assume that the firm is closely held and that its stock has outperformed the market for the last 5 years. In addition, the firm has earned (and expects to continue earning) a return on capital of 8% on its investments. The firm has also paid large dividends every year for the last decade. Which of the following actions would you advice the firm to take? (1 pt)
   a. Borrow $200 million and buy back stock today
   b. Borrow money over the next 5 years and invest in new projects
   c. Borrow money over the next 5 years and pay higher dividends
   d. Borrow money over the next 5 years and buy back stock

Explain (very briefly):
2. NorthFace Inc. is a firm that manufactures skis. The firm has no debt outstanding, 50 million shares trading at $80 per share and a beta of 1.00. The firm is planning to increase its debt to capital ratio to 25% and believes that its cost of capital will drop to 8% at this debt ratio. The current riskfree rate is 5% and the risk premium is 4%. Assuming that they can borrow the money today and are able to buy the shares back at the current stock price, estimate the value per share after the repurchase. (You can assume 3% growth in firm value forever) (3 points)
3. Assuming that your objective is to design the perfect bond for each of these firms, choose the bond that you would use to fund each of the following companies. Pick one of each of the following choices (Circle the right answer): ( 1 point each)

- Maturity: Short term or Long term
- Currency: Dollar or Mixed Currency
- Fixed or Floating: Fixed rate or Floating rate
- Straight or Convertible: Straight or Convertible

a. A steel company with heavy infrastructure investments, no pricing power and stable earnings, with all of its operating earnings in the United States.

   Maturity: Short Term Long Term
   Currency: Dollar Mixed-Currency
   Fixed or Floating: Fixed Floating
   Straight or Convertible: Straight Convertible

b. A mature consumer product company whose primary asset is its brand name, with substantial pricing power and revenues spread over all parts of the globe.

   Maturity: Short Term Long Term
   Currency: Dollar Mixed-Currency
   Fixed or Floating: Fixed Floating
   Straight or Convertible: Straight Convertible

c. A technology company with products that become obsolete quickly, U.S. dollar cashflows, with a high expected growth rate, in a very competitive industry.

   Maturity: Short Term Long Term
   Currency: Dollar Mixed-Currency
   Fixed or Floating: Fixed Floating
   Straight or Convertible: Straight Convertible