Spring 2009 Name:

Quiz 3: Corporate Finance

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

1. Beltran Enterprises is an auto parts company that has accumulated considerable debt. The firm has 40 million shares, trading at $ 15 a share, and $ 1200 million in debt outstanding (in market value terms). The current levered beta for the firm is 2.86 and the firm has a BB rating, with a default spread of 6% over the riskfree rate. The riskfree rate is 4% and the equity risk premium is 6%. The marginal tax rate is 40%.

a. Estimate the current cost of capital for the firm. (1 point)

b. Now assume that the firm is considering issuing equity, with the intent of halving its debt to capital ratio. If this action will improve the rating of the firm to A, with a default spread of 2.5% over the risk free rate, estimate the new cost of capital for the firm. (3 points)

2. Rubik Inc. has 250 million shares outstanding, trading at \$ 10 a share, and no debt outstanding. The beta for the stock is 1.00; the riskfree rate is 4% and the equity risk premium is 6%; the marginal tax rate is 40%. The firm is considering borrowing \$ 1 billion and buying back shares. If investors are rational, and the stock price on the buy back is \$10.80, estimate the pre-tax cost of debt on the borrowing. (You can assume no growth in the savings in perpetuity) (3 points)

3. Razor Travel Corp. is a company with only US operations and in two businesses – hotels, and travel services. The estimated duration and the value of the assets in each business are listed below, as well as the current cash balance of the firm:

Asset	Value ($ million)	Duration (in years)
Hotels	2000	12
Travel Services	1000	3
Cash	500	0

The firm currently has $ 500 million in very short-term (duration=0) debt and $1500 million (in market value terms) in a 10-year zero coupon bond outstanding. If the firm is considering using its entire cash balance to retire debt, and it wants to have the duration of its assets match the duration of its debt after the transaction, how much of each type of debt would you retire? (3 points)