Spring 2010 Name:

Quiz 2: Corporate Finance

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

1. You have been asked to review the cost of capital computation for Stolley Inc., a small retail company. The company currently has 500 million shares trading at $10 a share, no conventional debt and has estimated its cost of capital to be 10% (based upon a 100% equity ratio). However, the firm has lease commitments of $ 400 million a year for the next 4 years and $ 200 million a year for the following 3 years. If the pre-tax cost of debt for the firm is 6% and the marginal tax rate is 40%, estimate the correct cost of capital. (You can assume that the company's cost of equity will remain unchanged) (2 points)

2. Townsville Courier is s small town newspaper, with revenues of \$ 300,000 and pre-tax operating income of \$50,000. It is considering starting an online edition that would be accessible at no cost to the general public and has collected the following information:

i. The initial cost of setting up the online edition is \$ 40,000. That expense will be capitalized and depreciated straight line over 5 years to a salvage value of zero.
ii. The annual operating cost of maintaining the online edition will be \$ 20,000.
iii. The newspaper plans to use its existing computer server, which has sufficient capacity for the existing business for the next 5 years. If the server is also used for the online edition, though, <u>a new server will be needed at the end of year 2</u>. The cost of a server is \$20,000 (and remain constant in nominal terms over time) and you plan to expense the amount, in the year in which you spend the money.
iv. The cost of capital is 15% and the tax rate is 40%.

a. What is the opportunity cost (in present value terms) of using up the server capacity early? (1 point)

b. Assuming a project life of 5 years and advertising revenues of \$ 45,000/year, is this venture a good one? (3 points)

3. You own the only upscale restaurant in a town and generated $ 80,000 in operating income last year on revenues of $600,000. You are considering initiating a new service, where you will prepare meals for entire families, which can be picked up at the restaurant. You have collected the following information:

- ➔ You plan to use your existing kitchen, but you will have to invest $60,000 up front to modify and expand the facilities. That investment will depreciated straight line over the next 5 years down to a salvage value of $10,000.
- ➔ You expect to sell about 150 meals/month each month for the next 5 years at $50/meal. The direct cost (food and packaging) for each meal will be $20/meal.
- ➔ While your current chef will be preparing the meals, you expect that preparation to take up 25% of her time. Consequently, you plan to increase her annual salary from $60,000 to $72,000 and to allocate 25% of the salary to this project.
- ➔ You expect to lose some of your regular restaurant customers, as a result of the family meal plan. As a consequence, revenues at the restaurant will drop by 5% and operating income by 10%.
- ➔ Your cost of capital is 12% and the tax rate is 40%.

Estimate the net present value of this investment over a 5-year life. (4 points)