Practice Quiz 3 (Covers capital structure)

1. Cowan Industries is an all equity funded chemical company, with 200 million shares trading at $10 a share; the cost of equity is 9%. The firm is considering borrowing $600 million at an interest rate of 6% and buying back shares. If the marginal tax rate is 40%, estimate the new cost of capital for the firm. (The riskfree rate is 5% and the equity risk premium is 4%) (4 points)
2. Torre Inc. is a small, sporting goods firm, with 20 million shares outstanding, trading at $4 a share, and $20 million in debt (market value); the firm’s current cost of capital is 10%. The firm is planning to recapitalize by borrowing an additional $30 million and buying back shares, thus lowering its cost of capital to 9%.

   a. Assuming a 3% growth in savings over time, estimate the change in firm value from moving to the new debt ratio. (3 points)

   b. Now assume that Torre Inc. is able to buy back the $30 million at $5/share. Estimate the value per share of the remaining shares. (3 points)