Session 13: Post Class tests

1. You are given the following table with forecasted operating income for a young growth firm for the next 5 years. If the firm comes into the current year with an NOL of $ 50 million, estimate the taxes, after-tax operating income and tax rate every year for the next 5 years. The marginal tax rate for the firm is 40%.

	1	2	3	4	5
Pre-tax Operating Income	-$50.00	-$25.00	$30.00	$60.00	$100.00
Taxes					
After-tax Operating Income					
Tax rate					

2. You are valuing a high growth company that reported an operating loss of -$100 million on revenues of $500 million in the most recent year. You expect revenues to grow 20% a year for the next 10 years and the after-tax operating margin to improve to 8% by year 10. If the sales to capital ratio will be 2.0 through the entire 10-year period and the current year's invested capital is $800 million, what is the imputed return on capital (based on your estimates) in year 10?
    a. -12.5%
    b. 11.81%
    c. 19.08%
    d. 30.95%
    e. None of the above
3. You are valuing Consta Brands, a mature company. The company is expected to earn $120 million in after tax operating income next year and is in stable growth, growing 2% a year in perpetuity. Its current management is both incompetent (earning a return on capital of only 8% on projects) and conservative (all equity funded, with a cost of capital of 10%). There is a 30% chance that the company will be taken over by an activist investor, who plans to increase the debt ratio (lowering the cost of capital to 9%) while also seeking out better investments (with a return on capital of 10%). If there are 50 million shares outstanding, how much would you be willing to pay per share for Consta Brands?
    a. $22.50
    b. $23.98
    c. $27.43
    d. $31.29
    e. None of the above
4. Delray Stores is a retail company that is facing a shrinking market. The firm generated $ 50 million in after-tax operating income in the most recent year, but expects to shut down 10% of its stores, each year for the next 5 years. Which of the following would you most expect to see in the next 5 years?
    a. Increasing operating income each year and after-tax cash flows < operating income
    b. Increasing operating income each year and after-tax cash flows > operating income

c. Decreasing operating income each year and after-tax cash flows < operating income
d. Decreasing operating income each year and after-tax cash flows > operating income

5. Sigma Casino is a publicly traded firm that is burdened with too much debt and is in significant financial trouble. It has 10-year zero coupon bonds that are trading at 50% of face value and a DCF valuation of the firm as a going concern has generated a value of $6/share for the equity. If the risk free rate is 3% and you expect the equity to be worth nothing if the company folds, what would you be willing to pay per share for Sigma Casino?
   a. Nothing
   b. $1.97
   c. $3.00
   d. $4.03
   e. $6.00