Session 14C: Post Class tests

- 1. If you do an intrinsic valuation of a company, and there is no new information that comes out about the company, the intrinsic value should not change.
 - a. True
 - b. False
- 2. You are trying to make a judgment on whether the S&P 500 is fairly valued. The index is trading at 2000 and the aggregate earnings on the index in the next year is expected to be 150. If the cash flows returned (as dividends and buybacks) in the most recent time period amounted to 80% of the earnings and the book value of equity for the index is 1000, what is the fair value of the index (assuming that the current return on equity and payout policies are maintained in perpetuity, the risk free rate is 4% and the equity risk premium is 5%?
 - a. 550
 - b. 1000
 - c. 2000
 - d. 2500
 - e. Cannot be determined without more information
- 3. You are valuing a mature, dividend-paying bank. The bank expects to generate earnings per share of \$2.50 per share next year on a book value of equity of \$25 per share. Assuming that the firm's return on equity is stable (at current levels), its expected growth rate is 2% a year forever and its cost of equity is 8%, what is the value per share for the bank?
 - a. \$25 per share
 - b. \$31.25 per share
 - c. \$33.33 per share
 - d. \$41.67 per share
 - e. None of the above
- 4. 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 | | | | | |

- 5. 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
- 6. Assume that you are given the following cash flows for a young growth company with year-specific costs of capital. Compute the cumulative present value of the expected cash flows.

| | 1 | 2 | 3 | 4 | 5 |
|---------|-----------|----------|----------|----------|------------|
| FCFF | -\$100.00 | -\$50.00 | \$100.00 | \$250.00 | \$1,000.00 |
| Cost of | | | | | |
| capital | 12.00% | 11.50% | 11.00% | 10.50% | 10.00% |