

## Session 15B: Post Class tests

1. You are valuing a TechStar, young, growth company that has \$100 million in revenues on which it reported an operating loss of \$50 million. It is competing in a market that is currently \$10 billion, growing at 10% a year. If this company expects to have a market share of 5% by year 10, what compounded annualized revenue growth rate would you project for the next 10 years?
  - a. 17.5%
  - b. 29.2%
  - c. 50%
  - d. 129.7%
  - e. None of the above
2. Now assume that TechStar expects revenues to double next year, while halving its operating loss. In addition, assume that the company will generate \$4 of revenues for every dollar of capital invested. What is the free cash flow to the firm next year?
  - a. \$0 million
  - b. -\$25 million
  - c. -\$50 million
  - d. -\$75 million
  - e. None of the above
3. When valuing young growth companies, you generally have to estimate the cost of capital each year and adjust it to reflect the fact that your companies is getting larger, more profitable and perhaps less risky over time. Assume that you have followed this rule and estimate that your cost of capital will decline from 15% in year 1 to 12% in year 2 to 10% in year 3. If you expect to generate a positive cash flow of \$10 million in year 3, what is the present value of this cash flow?
  - a. \$6.58 million
  - b. \$7.06 million
  - c. \$7.12 million
  - d. \$7.51 million
  - e. None of the above
4. You have just completed your valuation of TechStar and arrived at a value of \$250 million for the equity in your DCF. Given its small revenues and big losses, you are concerned that the company will not survive. If you assess a probability of 20% to failure and you estimate that your equity will be worth only \$50 million if the firm fails, what value would you attach to the equity?
  - a. \$50 million
  - b. \$200 million
  - c. \$210 million
  - d. \$250 million
  - e. None of the above
5. Crayola Inc. is a family-controlled toy company that is run conservatively and you have valued it with its existing management in place to be worth \$15/share. You believe that the company will be double in value with more aggressive

management in place. If the stock is currently trading at \$20/share, what is the probability that the market is attaching to change in the company?

- a. 0%
- b. 33.33%
- c. 50.00%
- d. 66.67%
- e. None of the above