

Name _____

1. A company's invested capital structure is listed on their balance sheet as follows:

	\$20,000,000
Debt (8% coupon, maturing in 10 years)	\$10,000,000
Preferred Stock (6% cumulative, \$1,000 par)	\$30,000,000
Common Equity (2,000,000 shares outstanding, \$0.01 par)	

The following market information is also available:

Bond Price	105
Preferred Stock Price	70
Common Stock Price	\$11
Beta	1.6
Return on 90-day T-Bills	4%
Return on S&P 500 index	10%

The company pays a 40% tax rate on its earnings.

a. Calculate this company's costs of debt, preferred stock, and common equity.

Name _____

MBA 508 Final Exam

b. Calculate the market values of this company's invested capital.

c. Calculate this company's WACC.

Name _____

2. A firm has a WACC of 12%, \$500,000 in 9% debt, and \$800,000 in equity. Both debt and equity are shown at market values, the firm pays no taxes, and the firm is in no danger of dealing with financial distress.

a. Determine the shareholders' expected return on equity.

b. How can the expected return on equity be reduced?

c. How does your answer to part a change if the firm pays a 40% corporate tax rate?

Name _____

MBA 508 Final Exam

3. In the year ending October 2007, Walmart paid out \$1,929 million as debt interest. Assume an interest rate of 6% and a corporate tax rate of 35%.

a. How much more tax would Walmart have paid if the firm had been entirely equity-financed?

b. What would be the present value of Walmart's interest tax shield if the company planned to keep its borrowing permanently at the 2007 level?

Name _____

4. Equity, Inc. is currently an all-equity-financed firm. It has 100,000 shares outstanding that sell for \$20 each. The firm has an operating income of \$300,000 and pays no taxes. The firm contemplates a restructuring that would issue \$500,000 in 8% debt which will be used to repurchase stock. Show the value of the firm, EPS, and rate of return on the stock before and after the proposed restructuring.

Name _____

5. Equity, Inc. (from the previous problem) decides not to restructure, but instead decides to do something for the benefit of its shareholders. They are deciding between issuing a \$1 per share dividend or repurchasing 5,000 shares of stock. Assuming the firm begins with \$250,000 cash, prepare a simple balance sheet for the firm before it makes its decision and what the balance sheet would look like as a result of each of the three choices detailed above. Also, for each of the three options, how many shares outstanding exist after the decision, and what would the new share price be?

Initial Balance Sheet	

Cash Dividend	

Stock Repurchase	

	Initial	Cash Dividend	Stock Repurchase
Shares Outstanding	100,000		
Share Price	\$20		

Name _____

6. Fill out the following table for an owner of 1,000 shares of Equity, Inc. stock before a dividend/repurchase decision is made and the results under each of the three options. Assume that if a repurchase is made, this shareholder sells back 200 shares to the firm.

	Initial	Cash Dividend	Stock Repurchase
Shares Owned			
Total Value of Shares Owned			
Cash Received			
Total Value for Shareholder			

7. (This problem needs to be completed in Excel. Each of the parts below should be in a separate Excel tab.)

You can find the following information on a firm's 2015 financial statements:

Sales	\$850,000
Operating Costs	\$250,000
Interest	\$50,000
Current Assets	\$1,000,000
Net PPE	\$2,000,000
Current Liabilities	\$600,000
Long Term Debt	\$400,000
Common Stock	\$500,000
Retained Earnings	\$1,500,000

This company pays a 12.5% interest rate, a 35% tax rate, and no dividends.

- Construct the company's 2015 Income Statement and Balance Sheet (remember that the Retained Earnings figure above is the final figure for 2015).
- Prepare the 2016 and 2017 pro forma financial statements using the percent of sales method, including any external financing needed, if the company expects 10% sales growth each year and is operating at full capacity.
- Redo part b with the assumption that the company is operating at 85% capacity.
- Use your result in part c but apply the external financing needed to the balance sheets in both years.
 - Use only debt financing.
 - Use only equity financing.
 - Maintain the original debt-equity ratio.