Directions: Answer the following questions on a separate document. Explain how you reached the answer or show your work if a mathematical calculation is needed, or both. Submit your assignment using the assignment link in the course shell. This homework assignment is worth 100 points.

## Use the following information for Questions 1 through 8:

Assume that you recently graduated and have just reported to work as an investment advisor at the one of the firms on Wall Street. You have been presented and asked to review the following Income Statement and Balance Sheets of one of the firm's clients. Your boss has developed the following set of questions you must answer.

## Income Statements and Balance Sheet

| Balance Sheet | 2012 | 2013 |
| :--- | ---: | ---: |
| Cash | $\$ 9,000$ | $\$ 7,282$ |
| Short-term investments | 48,600 | 20,000 |
| Accounts receivable | 351,200 | 632,160 |
| Inventories | 715,200 | $1,287,360$ |
| Total current assets | $\$ 1,124,000$ | $\$ 1,946,802$ |
| Gross fixed assets | 491,000 | $1,202,950$ |
| Less: Accumulated depreciation | 146,200 | 263,160 |
| Net fixed assets | $\$ 344,800$ | $\$ 939,790$ |
| Total assets | $\$ 1,468,800$ | $\$ 2,886,592$ |
|  |  |  |
| Liabilities and Equity | $\$ 145,600$ | $\$ 324,000$ |
| Accounts payable | 200,000 | 720,000 |
| Notes payable | 136,000 | 284,960 |
| Accruals | $\$ 481,600$ | $\$ 1,328,960$ |
| Total current liabilities | 323,432 | $1,000,000$ |
| Long-term debt | 460,000 | 460,000 |
| Common stock (100,000 <br> shares) | $\$ 1,468,800$ | $\$ 2,886,592$ |
| Retained earnings |  |  |
| Total equity | 9768 | $\$ 537,632$ |
| Total liabilities and equity |  |  |


| Income Statements | 2012 | 2013 |
| :--- | ---: | ---: |
| Sales | $\$ 3,432,000$ | $\$ 5,834,400$ |
| Cost of goods sold except depr. | $2,864,000$ | $4,980,000$ |
| Depreciation and amortization | 18,900 | 116,960 |
| Other expenses | 340,000 | 720,000 |
| Total operating costs | $\$ 3,222,900$ | $\$ 5,816,960$ |
| EBIT | $\$ 209,100$ | $\$ 17,440$ |
| Interest expense | 62,500 | 176,000 |
| EBT | $\$ 146,600$ | $(\$ 158,560)$ |
| Taxes (40\%) | 58,640 | $-63,424$ |
| Net income | $\$ 87,960$ | $(\$ 95,136)$ |


| Other Data | 2012 | 2013 |
| :--- | ---: | ---: |
| Stock price | $\$ 8.50$ | $\$ 6.00$ |
| Shares outstanding | 100,000 | 100,000 |
| EPS | $\$ 0.88$ | $(\$ 0.95)$ |
| DPS | $\$ 0.22$ | 0.11 |
| Tax rate | $40 \%$ | $40 \%$ |
| Book value per share | $\$ 6.64$ | $\$ 5.58$ |
| Lease payments | $\$ 40,000$ | $\$ 40,000$ |


| Ratio Analysis | 2012 | 2013 |
| :--- | ---: | ---: |
| Current | 2.3 | 1.5 |
| Quick | 0.8 | 0.5 |
| Inventory turnover | 4 | 4 |
| Days sales outstanding | 37.3 | 39.6 |
| Fixed assets turnover | 10 | 6.2 |
| Total assets turnover | 2.3 | 2 |
| Debt ratio | $35.60 \%$ | $59.60 \%$ |
| Liabilities-to-assets ratio | $54.80 \%$ | $80.70 \%$ |
| TIE | 3.3 | 0.1 |
| EBITDA coverage | 2.6 | 0.8 |
| Profit margin | $2.60 \%$ | $-1.6 \%$ |
| Basic earning power | $14.20 \%$ | $0.60 \%$ |
| ROA | $6.00 \%$ | $-3.3 \%$ |
| ROE | $13.30 \%$ | $-17.1 \%$ |
| Price/Earnings (P/E) | 9.7 | -6.3 |
| Price/Cash flow | 8 |  |
| Market/Book | 1.3 | 27.5 |

1. What is the free cash flow for 2013 ?
2. Suppose Congress changed the tax laws so that Berndt's depreciation expenses doubled. No changes in operations occurred. What would happen to reported profit and to net cash flow?
3. Calculate the 2013 current and quick ratios based on the projected balance sheet and income statement data. What can you say about the company's liquidity position in 2013?
4. Calculate the 2013 inventory turnover, days sales outstanding (DSO), fixed assets turnover, and total assets turnover.
5. Calculate the 2013 debt ratio, liabilities-to-assets ratio, times-interest-earned, and EBITDA coverage ratios. What can you conclude from these ratios?
6. Calculate the 2013 profit margin, basic earning power (BEP), return on assets (ROA), and return on equity (ROE). What can you say about these ratios?
7. Calculate the 2013 price / earnings ratio, price / cash flow ratio, and market / book ratio.

FIN 534 - Homework Set \#1
8. Use the extended DuPont equation to provide a summary and overview of company's financial condition as projected for 2013. What are the firm's major strengths and weaknesses?

