|  |
| --- |
| **PROBLEM 7-1**  Consider the following operating figures: |
| Net sales $1,079,143 |
| Cost and deductions: |
| Cost of sales 792,755 |
| Selling and administration 264,566 |
|  |
| Interest expense, net 4,311 |
| Income taxes 5,059 |
| 1,066,691 |
| $ 12,452 |
| Note: Depreciation expense totals $40,000. |
| **Required**  a. Compute the times interest earned. |
| b. Compute the cash basis times interest earned. |
| **PROBLEM 7-2**  Jones Petro Company reports the following consolidated statement of income: |
| Operating revenues $2,989 |
| Costs and expenses: |
| Cost of rentals and royalties 543 |
| Cost of sales 314 |
| Selling, service, administrative, and general expense 1,424 |
| Total costs and expenses 2,281 |
| Operating income 708 |
| Other income 27 |
| Other deductions (interest) 60 |
| Income before income taxes 675 |
| Income taxes 309 |
| Income before outside shareholders’ interests 366 |
| Outside shareholders’ interests 66 |
| Net income $ 300 |
| Note: Depreciation expense totals $200; operating lease payments total $150; and preferred dividends total $50. Assume that 1/3 of operating lease payments is for interest. |
|  |
| **Required**  a. Compute the times interest earned. |
| b. Compute the fixed charge coverage. |
| **PROBLEM 7-3**  Sherwill’s statement of consolidated income is as follows: |
| Net sales $658 |
| Other income 8 |
| 666 |
| Costs and expenses: |
| Cost of products sold 418 |
| Selling, general, and administrative expenses 196 |
| Interest 16 |
| 630 |
| Income before income taxes and extraordinary charges 36 |
| Income taxes 18 |
| Income before extraordinary charge 18 |
| Extraordinary charge—losses on tornado damage (net) 4 |
| Net income $ 14 |
| Note: Depreciation expense totals $200; operating lease payments total $150; and preferred dividends total $50. Assume that 1/3 of operating lease payments is for interest. |
|  |
| **Required**  a. Compute the times interest earned. |
| b. Compute the fixed charge coverage.  **PROBLEM 7-4** |
| Kaufman Company’s balance sheet follows. |
| Assets |
| Current assets |
| Cash $ 13,445 |
| Short-term investments—at cost (approximate market) 5,239 |
| Trade accounts receivable, less allowance of $1,590 88,337 |
| Inventories—at lower of cost (average method) or market: |
| Finished merchandise 113,879 |
| Work in process, raw materials and supplies 47,036 |
| 160,915 |
| Prepaid expenses 8,221 |
| Total current assets 276,157 |
| Other assets: |
| Receivables, advances, and other assets 4,473 |
| Intangibles 2,324 |
| Total other assets 6,797 |
| Property, plant, and equipment: |
| Land 5,981 |
| Buildings 78,908 |
| Machinery and equipment 162,425 |
| 247,314 |
| Less allowances for depreciation 106,067 |
| Net property, plant, and equipment 141,247 |
| Total assets $424,201 |
| Liabilities and Shareholders’ Equity |
|  |
| Current liabilities: |
| Notes payable $ 2,817 |
| Trade accounts payable 23,720 |
| Pension, interest, and other accruals 33,219 |
| Taxes, other than income taxes 4,736 |
| Income taxes 3,409 |
| Total current liabilities 67,901 |
| Long-term debt, 12% debentures 86,235 |
| Deferred income taxes 8,768 |
| Minority interest in subsidiaries 12,075 |
| Total liabilities 174,979 |
|  |
| Stockholders’ equity: |
| Serial preferred 9,154 |
| Common $5.25 par value 33,540 |
| Additional paid-in capital 3,506 |
| Retained earnings 203,712 |
| 249,912 |
| Less cost of common shares in treasury 690 |
| Total shareholders’ equity 249,222 |
| Total liabilities and shareholders’ equity $424,201 |
|  |
| **Required**  a. Compute the debt ratio. |
| b. Compute the debt/equity ratio. |
| c. Compute the ratio of total debt to tangible net worth. |
| d. Comment on the amount of debt that Kaufman Company has.  **PROBLEM 7-5** |
| Mr. Parks has asked you to advise him on the long-term debt-paying ability of Arodex Company. He provides you with the following ratios: |
|  |
| **2007 2006 2005** |
| Times interest earned 8.2 6.0 5.5 |
| Debt ratio 40% 39% 40% |
| Debt to tangible net worth 80% 81% 81% |
|  |
| **Required:**  a. Give the implications and the limitations of each item separately and then the collective influence that could be drawn from them about Arodex Company’s long-term debt position. |
|  |
| b. What warnings should you offer Mr. Parks about the limitations of ratio analysis for the purpose stated here? |
|  |

**Problem 7 -6**

Allen Company and Barker Company are competitors in the same industry. Selected financial data from their 2011 statements follow.

|  |  |  |
| --- | --- | --- |
|  | Allen Company | Barker Company |
| Cash | $ 10,000 | $ 35,000 |
| Accounts receivable | 45,000 | 120,000 |
| Inventory | 70,000 | 190,000 |
| Investments | 40,000 | 100,000 |
| Intangibles | 11,000 | 20,000 |
| Property, plant, and equipment  Total assets | 180,000  $356,000 | 520,000  $985,000 |
| Accounts payable | $ 60,000 | $165,000 |
| Bonds payable | 100,000 | 410,000 |
| Preferred stock, $1 par | 50,000 | 30,000 |
| Common stock, $10 par | 100,000 | 280,000 |
| Retained earnings | 46,000 | 100,000 |
| Total liabilities and capital | $356,000 | $985,000 |

Income Statement

For the Year Ended December 31, 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Allen Company | | Barker Company | |
| Sales | | $1,050,000 | | $2,800,000 | |
| Cost of goods sold | | 725,000 | | 2,050,000 | |
| Selling and administrative expenses | | 230,000 | | 580,000 | |
| Interest expense | | 10,000 | | 32,000 | |
| Income taxes | | 42,000 | | 65,000 | |
| Net income | | $ 43,000 | | $ 73,000 | |
| Industry Averages: | |  | |  | |
| Times interest earned | |  | | 7.2 times | |
| Debt ratio | |  | | 40.3% | |
| Debt/equity | |  | | 66.6% | |
| Debt to tangible net worth | |  | | 72.7% | |
| Industry Averages: | |  | |  | |  | |
| Times interest earned | |  | |  | | 7.2 times | |
| Debt ratio | |  | |  | | 40.3% | |
| Debt/equity  Debt to tangible net worth | |  | |  | | 66.6%  72.7% | |

**Required**

1. Times interest earned
   1. Debt ratio
   2. Debt/equity ratio
   3. Debt to tangible net worth
2. Is Barker Company in a position to take on additional long-term debt? Explain.
3. Which company has the better long-term debt position? Explain.