Data Table

(Click on the icon located on the top-right corner of the data table below in order to copy its contents into a spreadsheet.)

Item	Pelican Paper, Inc.	Timberland Forest, Inc.
Total assets	$9,800,000	$9,800,000
Total equity (all common)	8,800,000	4,500,000
Total debt	1,000,000	5,300,000
Annual interest	100,000	530,000
Total sales	22,000,000	22,000,000
EBIT	5,500,000	5,500,000
Earnings available for common stockholders	3,247,200	3,036,000

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The relationship between financial leverage and profitability Pelican Paper, Inc., and Timberland Forest, Inc., are rivals in the manufacture of craft papers. Some financial statement values for each company follow. Use them in a ratio analysis that compares the firms' financial leverage and profitability.

a. Calculate the following debt and coverage ratios for the two companies. Discuss their financial risk and ability to cover the costs in relation to each other.

(1) Debt ratio

(2) Times interest earned ratio

b. Calculate the following profitability ratios for the two companies. Discuss their profitability relative to each other.

(1) Operating profit margin

(2) Net profit margin

(3) Return on total assets

(4) Return on common equity

c. In what way has the larger debt of Timberland Forest made it more profitable than Pelican Paper? What are the risks that Timberland's investors undertake when they choose to purchase its stock instead of Pelican's?

a. The debt ratio for Pelican is 33.1%. (Round to one decimal place.)

The debt ratio for Timberland is 30.1%. (Round to one decimal place.)

The times interest earned ratio for Pelican is ☐. (Round to one decimal place.)

The times interest earned ratio for Timberland is ☐. (Round to one decimal place.)

b. The operating profit margin for Pelican is ☐%. (Round to one decimal place.)

The operating profit margin for Timberland is ☐%. (Round to one decimal place.)

The net profit margin for Pelican is ☐%. (Round to one decimal place.)

The net profit margin for Timberland is ☐%. (Round to one decimal place.)

The return on total assets for Pelican is ☐%. (Round to one decimal place.)

The return on total assets for Timberland is ☐%. (Round to one decimal place.)

The return on common equity for Pelican is ☐%. (Round to one decimal place.)

The return on common equity for Timberland is ☐%. (Round to one decimal place.)

Discuss their profitability relative to each other. (Select all the answers that apply.)

- ☐ **A.** Timberland is more profitable than Pelican as shown by the higher net profit margin and return on assets.
- ☐ **B.** The return on equity for Timberland is higher than that of Pelican.
- ☐ **C.** The return on equity for Pelican is higher than that of Timberland.
- ☐ **D.** Pelican is more profitable than Timberland as shown by the higher net profit margin and return on assets.

c. In what way has the larger debt of Timberland Forest made it more profitable than Pelican Paper? What are the risks that Timberland's investors undertake when they choose to purchase its stock instead of Pelican's? (Select the best answer below.)

- ○ **A.** The lower profits of Timberland are due to the fact that interest expense is deducted from EBIT. Timberland has $530,000 of interest expense to Pelican's $100,000. Even after the tax shield from the interest tax deduction Timberland's profits are less than Pelican's by $211,200.
- ○ **B.** Even though Pelican is more profitable (higher net profit margin), Timberland has a higher ROE than Pelican due to the additional financial leverage risk.
- ○ **C.** Since Timberland has a higher relative amount of debt, the stockholders' equity is proportionally reduced resulting in the higher return on equity than that obtained by Pelican. The higher ROE brings with it higher levels of financial risk for Timberland equity holders.
- ○ **D.** All of the above.

Interpreting liquidity and activity ratios The table, shows key financial data for three firms that compete in the consumer products market: Procter & Gamble, Colgate-Palmolive, and Clorox.

a. Calculate each of the following ratios for all three companies: current ratio, quick ratio, inventory turnover, average collection period, total asset turnover.
b. What company is in the position of having greatest liquidity?
c. Would you say that the three companies exhibit similar performance or quite different performance in terms of collecting receivables? Why do you think that might be?
d. Which company has the most rapid inventory turnover? Which company appears to be least efficient in terms of total asset turnover? Are your answers to those questions a little surprising? If a company is best at inventory turnover and worst at total asset turnover, what do you think that means?

a. For the three companies, the current ratios are: (Round to three decimal places.)

	Procter and Gamble	Colgate-Palmolive	Clorox
Current ratio			

For the three companies, the quick ratios are: (Round to three decimal places.)

	Procter and Gamble	Colgate-Palmolive	Clorox
Quick ratio			

For the three companies, the inventory turnover ratios are: (Round to three decimal places.)

	Procter and Gamble	Colgate-Palmolive	Clorox
Inventory turnover			

For the three companies, the average collection periods are: (Round to three decimal places.)

	Procter and Gamble	Colgate-Palmolive	Clorox
Average collection period			

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	Procter & Gamble	Colgate-Palmolive	Clorox
Sales	$65,220	$15,209	$5,881
Cost of goods sold	32,973	6,072	3,221
Accounts receivable	4,726	1,417	505
Inventory	4,790	1,165	508
Total current assets	25,568	4,332	1,560
Total current liabilities	28,902	3,299	2,037
Total assets	117,040	12,130	4,570

(Note: All dollar values are in thousands.)

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	Procter and Gamble	Colgate-Palmolive	Clorox
Total asset turnover			

b. What company is in the position of having greatest liquidity? (Select the best answer below.)

- ○ **A.** Colgate-Palmolive
- ○ **B.** Procter & Gamble
- ○ **C.** Clorox
- ○ **D.** It is not possible to determine based on the information given.

c. Would you say that the three companies exhibit similar performance or quite different performance in terms of collecting receivables? Why do you think that might be? (Select the best answer below.)

- ○ **A.** Additional information is necessary to assess how well each firm collects receivables. The average collection period should be compared to each firm's own credit terms.
- ○ **B.** The three companies exhibit similar performance because they are in the different industries.
- ○ **C.** The three companies exhibit similar performance because they are in the same industry.
- ○ **D.** The three companies exhibit different performance because they are in the same industry.

c. Would you say that the three companies exhibit similar performance or quite different performance in terms of collecting receivables? Why do you think that might be? (Select the best answer below.)

- A. Additional information is necessary to assess how well each firm collects receivables. The average collection period should be compared to each firm's own credit terms.
- B. The three companies exhibit similar performance because they are in the different industries.
- C. The three companies exhibit similar performance because they are in the same industry.
- D. The three companies exhibit different performance because they are in the same industry.

d. Which company has the most rapid inventory turnover? (Select the best answer below.)

- A. Procter & Gamble
- B. Colgate-Palmolive
- C. Clorox
- D. It is not possible to determine based on the information given.

Which company appears to be least efficient in terms of total asset turnover? (Select the best answer below.)

- A. Clorox
- B. Colgate-Palmolive
- C. Procter & Gamble
- D. It is not possible to determine based on the information given.

If a company is best at inventory turnover and worst at total asset turnover, what do you think that means? (Select the best answer below.)

- A. The company's high inventory turnover could indicate they keep excessive inventory on-hand. Therefore, while the number is impressive and it could mean there are problems, the total asset turnover indicates the company is effective at using its assets to generate sales.
- B. The company's low inventory turnover could indicate they keep excessive inventory on-hand. Therefore, while the number indicates there are no problems, the high total asset turnover indicates assets are not being used to generate sales.
- C. The company's high inventory turnover could indicate they do not keep enough inventory on-hand. Therefore, while the number is impressive, it could mean there are problems, which would make sense based on the poor total asset turnover.
- D. If a company is best at inventory turnover and worst at total asset turnover, it means its competitors are not as effective in turning over their inventories or using their assets to generate sales.