E16-1

a.	2001	2000	1999	1998	1997
Net sales	100.00%	100.00%	100.00%	100.00%	100.00%
Gross profit on sales	49.02%	47.79%	41.32%	33.04%	33.51%
Selling, general, and administrative expenses	21.94%	22.65%	31.51%	32.51%	28.25%
Income (loss) from operations	27.75%	25.35%	11.62%	(0.84%)	(5.38%)
Interest income (expense)	1.30%	0.46%	(0.20%)	(0.66%)	(0.72%)
Net income (loss)	20.14%	15.82%	6.79%	(1.90%)	(4.07%)

b. The percentage income statements reveal a consistent, steady improvement from 1997 to 2001. Gross profit has grown from 33.5% of sales to 49.2% of sales. A steady improvement is also shown in the net income. The company improved from small losses in 1997 to 1998 to a very impressive 20% net income in 2001. There has also been a marked improvement in selling, general, and administrative expenses as a percentage of sales, falling from a high of 32.5% in 1998 to under 22% in 2001. One factor that may have contributed to the increased profitability was the huge popularity of Pokemon merchandise. In its letter to stockholders, the company states: "In all, fiscal 2001 was a very good year, one in which extraordinary results emanated from Pokemon." Another may have been the home run race between Sammy Sosa and Mark McGwire, which might have led to higher than normal sales of baseball cards. Typically, companies have more pricing power with such popular products, leading to higher margins. Much of the selling, general, and administrative costs may be fixed, and, as sales increase, they become a smaller percentage.

c. A potential investor needs to take into account that the popularity of the Pokemon products may be declining. Unless the company is able to replace those products with similarly popular brands, sales may not grow at rates consistent with prior years. Profitability may be affected, as the margins on confections, bubble gum, and baseball cards may not be as great as those on "hot" products such as Pokemon.

d. With earnings per share of $1.97, the company's Price-to-earnings ratio was only 5.4 at the highest stock price. This would be an extremely low valuation, given the company's growth rate and profitability. It would appear that investors are not expecting the same extraordinary results because of some of the factors mentioned in c. (Note to instructor: On June 29, 2001, the stock closed at $11.69, an increase of 9% over its highest quarterly close and 48% over its lowest quarterly close for the quarter ended March 3, 2001.)

E16-2

Projected sales (in thousands) $439,268 × 1.15 = $505,158

CGS% 51%

Projected CGS		$257,631
Inventory turnover in 2001:	Cost of goods sold	$223,924
	/ Average inventory	/ 20,132

= Inventory turnover equals 11.12 times

11.12 = CGS/Average inventory

11.12 = (CGS/(1/2 (19,526 + x)))

11.12 = ($257,631/(1/2 (19,526 + x)))

x = ((CGS)/(11.12 × 1/2)) – $19,526

x = ($257,631/(11.12 × 1/2)) – $19,526

x = ($257,631/5.56) – $19,526

x = $46,336 – $19,526

x = $26,810

$26,810 is 5.3% of the projected sales. This is consistent with levels of 4.4% in 2001 and 5.5% in 2000. The above projection illustrates a general methodology. More exact estimates of inventory would require an understanding by product lines for Topps.

E16-3 a.	2001	2000	1999	1998	1997
Cash and equivalents	56.64%	58.72%	54.04%	35.96%	35.56%
Working capital	49.27%	55.06%	32.27%	34.04%	27.50%
Property, plant and equipment, net	3.99%	7.11%	9.62%	16.47%	18.96%
Long-term debt, less current portion	0.00%	0.00%	6.68%	36.71%	40.34%
Total assets	100.00%	100.00%	100.00%	100.00%	100.00%

The comparative data show very positive trends. The liquidity of the company has improved markedly, with cash and equivalents increasing from 36% of total assets to 57%. Working capital has increased from 27.5% to 49% of total assets. The company has paid off all long-term debt, which was 40% of total assets in 1997.

b. 1) The current ratio would increase, as current assets would increase with no change in current liabilities.

2) The quick ratio would increase, as quick assets would increase with no change in current liabilities.

3) The debt-to-equity ratio would increase, as total debt as a percentage of total capitalization would increase.

4) The long-term debt-to-equity ratio would also increase, as long-term debt as a percentage of equity would increase.

E16-4

a.

Income Statement	X	Y
Sales	100%	100%
Cost of goods sold	40%	45%
Gross Profit	60%	55%
Operating expenses	20%	30%
Income before taxes	40%	25%
Income taxes	12%	8%
Net income	28%	18%
Balance Sheet	X	Y
Current assets	40%	20%
Plant and equipment, net	60%	80%
Total assets	100%	100%
Current liabilities	20%	15%
Long-term debt	10%	50%
Total liabilities	30%	65%
Equity	70%	35%
Total liabilities & equity	100%	100%

b. The percentage analysis reveals that, although Company Y has five times greater sales than X and four times greater assets, that X appears to be more profitable and have a stronger financial position. X's gross profit margin is 60% of sales versus 55% for Y, its operating expenses 20% versus 30% for Y, and its net income is 28% of sales versus 18% for Y. In addition, the balance sheet data show stronger liquidity with 40% current assets and less long-term debt, with 10% versus 50% for Y. X has 30% of its total financing by creditors versus 65% for Y.

c. Helpful ratios would be the current ratio, working capital, debt-to-equity, return on equity, and long-term debt-to-equity.

E16-5

Percentage income statements and balance sheets

Income Statement	A	B	C
Revenues	100.00%	100.00%	100.00%
Cost of goods sold	6.45%	62.87%	80.10%
Selling and administrative expenses	38.69%	13.68%	20.03%
Net income	12.60%	3.51%	–0.66%
Balance Sheet			
Current assets	51.29%	46.96%	52.11%
Inventories	8.06%	12.38%	43.83%
Current liabilities	35.75%	38.39%	25.97%
Total assets	100.00%	100.00%	100.00%
Total equity	47.97%	43.96%	41.58%

From the comparative income statements and balance sheets, it would appear that Company A is Pfizer, Company B is Motorola, and Company C is Kmart. Company A has an extremely low cost of goods sold percentage and much higher selling and administrative expenses. Drug companies are characterized by high gross profit margins. Much of the cost of developing drugs is research, which must be expensed in the period incurred according to current accounting rules. The lowest gross profit margin would be the discount retailer. It would also be expected that the discount retailer would have a much higher percentage of total assets tied up in inventory than either the manufacturer or the drug company. Company C has 44% of assets in inventories versus 8% and 12% for Companies B and C. The cash flow statements show that Company B has a negative cash flow from operations in 2000. This would be consistent with the extremely negative operating environment experienced by high-tech companies in the year 2000.

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