1. Retailers closely watch a number of financial ratios, including the gross profit (gross margin) percentage and inventory turnover. Suppose the results for the furniture department in a large store in a given year were:

Sales	$1,500,000
Cost of goods sold	900,000
Gross profit	$ 600,000
Beginning inventory	$ 325,000
Ending inventory	275,000

Required:

(1) Compute the gross profit percentage and the inventory turnover.

(2) Suppose the retailer is able to maintain a reduced inventory of $225,000 throughout the succeeding year. What inventory turnover would have to be obtained to achieve the same $600,000 gross profit? Assume that the gross profit percentage is unchanged.

(3) Suppose the retailer maintains inventory at the $225,000 level throughout the succeeding year but cannot increase the inventory turnover from the level in requirement 1. What gross profit percentage would have to be obtained to achieve the same total gross profit?

(4) Suppose the average inventory of $300,000 is maintained. Compute the total gross profit in the succeeding year if there is

a. A 10% increase of the gross profit percentage (that is, 10% of the percentage, not an additional ten percentage points) and a 10% decrease of the inventory turnover; or

b. A 10% decrease of the gross profit percentage and 10% increase of the inventory turnover.

(5) Why do retailers find the above types of ratios helpful? (30%)

2. During 2000 Central Corporation engaged in a number of complex transactions to restructure the business—swelling off a division, retiring bonds, and changing accounting methods. The company has always issued a simple single-step income statement, and the accountant has accordingly prepared the December 31 year end income statements for 1999 and 2000, shown at the top of the following.

The president of the company, James Chen, is pleased to see that both net income and earnings per share increased by 22% from 1999 to 2000 and intends to announce to the stockholders that the restructuring is a success.

Central Corporation
Income Statements
For the Years Ended December 31, 2000 and 1999

	2000	1999
Net Sales	$700,000	$840,000
Cost of Good Sold	(385,000)	(420,000)
Operating Expenses	(157,500)	(105,000)
Income Taxes Expense	(115,290)	(94,500)
Income from Operations of a Discontinued Segment	112,000	
Gain on Disposal of Discontinued Segment	98,000	
Extraordinary Gain on Retirement of Bonds	50,400	
Cumulative Effect of a Change in Accounting Principle	(33,600)	
Net Income	$269,010	$220,500
Earnings per share	$6.73	$5.51

Required:

(1) Recast the 2000 and 1999 income statements in proper multi-step form, including allocating income taxes to appropriate items (assume a 30 % income tax rate) and showing earnings per share (40,000 shares outstanding).

(2) What is your assessment of the restructuring plan and business operations in 2000? (25%)

3. The following data are from the 2000 and 1996 annual reports of AA Corporation, operator of over ten thousand AA's restaurants in forty countries.

	2000	1996
Rate of return on stockholders' equity	19.4%	20.5%
Operating income percentage on sales	26.93%	24.04%
Total asset turnover	0.65	0.68
Average total assets	$6,407 million	$4,961 million
Interest expense (net)	$ 178 million	$ 207 million
Income tax expense	$331 million	$ 222 million

Required:

(1) Complete the following condensed income statement for 2000. Round to the nearest million.

	2000
Sales	$?
Operating expenses	?
Operating income	$?
Interest expense (net)	$?
Pretax income	$?
Income tax expense	$?
Net income	$?

(2) Compute the following:

a. Pretax operating rate of return on total assets

b. Rate of return on sales

c. Average stockholders' equity

(3) Compare the values for 2000 to 1996. (25%)

4. Questions

(1) What is quality of earnings and what are the ways in which quality of earnings can be affected?

(2) "Net losses mean drains on cash." Do you agree? Explain. (20%)