5.11 Financial Analysis Techniques

Question 1
An analyst calculates the following data:

	Company A	Company B	Company C
Net profit margin	0.05	0.08	0.15
Total asset turnover	1.6	2.0	0.9
Leverage	2.5	1.5	2.0

Which of the three companies *most likely* has the highest return on equity?
A. Company A
B. Company B
C. Company C

Question 2
An analyst has gathered the following information:

€ millions	20X5	20X6	20X7
Average assets	117.0	116.0	115.0
Average liabilities	96.0	98.0	100.0
Revenues	40.0	42.5	45.0
Net profit margin	8.6%	8.7%	8.8%

Using only this information, the *most appropriate* conclusion is that over the three-year period:
A. return on assets has declined.
B. return on equity has increased.
C. total asset turnover has declined.

Question 3
The 20X9 financial information for a company is shown below:

(In $ Millions)	
Assets	500
Common stock	280
Retained earnings (cumulative)	100
Treasury stock	60

The company's debt to total capital ratio is *closest* to:

A. 0.24
B. 0.36
C. 0.56

Question 4
A company uses LIFO to determine the valuation for inventory and reports the following under US GAAP:

Selected Items from Financial Statements

(USD *millions*)	20X7	20X6
Current assets	1,400	1,680
Current liabilities	333	400

The company discloses that its LIFO reserve in 20X7 was $277 and in 20X6 was $450. If the company used FIFO instead of LIFO for its inventory valuation, then over the last year, the company's current ratio *most likely*:
A. decreased.
B. remained the same.
C. increased.

Question 5
A company reports the following information:

Selected Data (¥ billions)		
Item	20X5	20X6
Revenue	3.4	3.7
Current assets	5.0	5.2
Current liabilities	4.0	4.4

Based on this data, working capital turnover for 20X6 is *closest* to:
A. 3.94
B. 4.11
C. 4.63

Question 6
An analyst gathers the following information (in INR billions) for a company, selected from its financial statements:

INR billions	Current Year	Prior Year
EBIT	204	197
Net income	150	143
Short-term debt	106	110
Long-term debt	434	451
Shareholders' equity	1,509	1,447
Total assets	2,249	2,183

Based on this data, the current year's return on total capital is *closest* to:
A. 7.39%
B. 9.21%
C. 10.06%

Question 7
An analyst calculates the following data for the year ending 20X9.

Selected Financial Data	
Debt-to-equity	0.5
Total asset turnover	0.7
Net profit margin	18%
Tax rate	20%

Using DuPont analysis, the firm's return on equity (ROE) is *closest* to:
A. 15.1%
B. 18.9%
C. 25.2%

Question 8
An analyst prepares the following set of assumptions for a company:

Assumption	Rate
COGS-to-revenue ratio	20%
Operating expense-to-revenue ratio	40%
Tax rate	20%

The initial forecasted revenue is €1 million. In subsequent years, it is estimated to grow at 5%. The company's forecasted initial net income is *closest* to:
A. €200,000.
B. €320,000.
C. €336,000.

Question 9
An analyst collects the following information on a company:

	Current Year	Prior Year
Current ratio	2.00	2.00
Quick ratio	1.58	1.63

The company has no prepaid expenses and current liabilities have a year-end balance of $190,000 for each year. Based on this information, which of the following *most likely* increased during the current year?
A. Inventory
B. Quick assets
C. Current assets

Question 10
Which of the following is a limitation of ratio analysis?
A. Different assumptions result in different forecasts.
B. Performance from different divisions are consolidated for reporting.
C. Adjustments to reconcile results from different accounting standards distort comparisons.

Question 11
An analyst wants to know if a company has decreased its risk of defaulting on its long-term obligations. An increase in which of the following measures is the *most appropriate* indicator?
A. Cash ratio
B. Interest coverage ratio
C. Financial leverage ratio

Question 12
An analyst compiles the following data from a company's financial statements:

SAR millions	20X6	20X5	20X4
Revenue	1,600	1,400	1,300
Net income	200	100	100
Current assets	550	500	500
Total assets	2,150	1,700	1,600
Current liabilities	350	300	300
Total debt	1,100	800	800
Total liabilities	1,350	1,000	900

Based on only this information, the change in which of the following ratios from 20X5 to 20X6 *most likely* would be considered an improvement to profitability or solvency?
A. Debt-to-equity ratio
B. Return on equity ratio
C. Financial leverage ratio

Question 13
A company reports the following information (in HKD thousands):

Current Assets		Average Daily Expenses	
Cash	500,000	Cost of goods sold	5,000
Short-term investments	20,000	General and admin. expense	7,000
Accounts receivable	200,000	Stock-based compensation	50
Inventory	24,000	Depreciation	150

Based on this data, the company's defensive interval ratio is *closest* to:
A. 59 days.
B. 60 days.
C. 62 days.

Question 14
An analyst collects the following information on three companies:

Selected Financial Data			
(*in* AUD *except # of shares*)	Company A	Company B	Company C
Market price per share	15	55	30
Book value of assets	500,000	1,000,000	1,200,000
Book value of liabilities	60,000	250,000	850,000
Outstanding shares	10,000	10,000	20,000

Which company has the *highest* price-to-book ratio?
A. Company A
B. Company B
C. Company C

Question 15
Which of the following factors is *most likely* to cause a low fixed-asset turnover ratio? A company:
A. has newer fixed assets.
B. is a labor-intensive business.
C. has a high amount of working capital.

Question 16
A consultant gathers the following profitability ratios for a company:

Profitability Ratio (%)	20X1	20X2	20X3
Gross profit margin	31.00	31.70	32.10
Operating profit margin	10.10	10.00	9.90
Pretax margin	9.90	9.90	9.90

Based on this information, over this period the company *most likely* improved its ability to cover:
A. raw material costs.
B. operating expenses.
C. nonoperating expenses.

Question 17
A company's manager collects the following data:

Selected Financial Data	
(EUR *thousands*)	
Net income	100,000
Lease payments	20,000
Interest payments	40,000
Taxes	50,000

Based on only this data, the company's interest coverage ratio is *closest* to:
A. 2.50
B. 3.50
C. 4.75

Question 18
An analyst calculates the following from a company's financial statements:

	20X4	20X3
Return on assets (%)	16.0	20.0
Price to earnings	16.9	13.3
Debt-to-equity	1.1	1.1

Which of the following *best describes* the change in the company's relative valuation?
A. It is lower since return on assets decreased.
B. It is higher since price to earnings increased.
C. It is unchanged since debt-to-equity is constant.

Question 19
An analyst collects the following information about a company:

Selected Financial Data		
(CNY *millions*)	20X5	20X4
Ending inventory	35	45
Ending total assets	200	150
Revenue	1,400	700
Net income	400	100

For the year ended 20X5, the company's total asset turnover (TAT) is *closest* to:
A. 6
B. 7
C. 8

Question 20
A company reports the following information:

Selected Items from Financial Statements (MXN *millions*)

	20X4	20X3
Revenue	15,000	13,500
Cost of goods sold	5,000	4,000
Operating expenses	2,500	2,300
Interest	200	1,100
Taxes	800	1,200
Dividends paid	1,500	100

Based only on this information, which of the following *best describes* the change in the company's profitability?
A. Operating profit margin and net profit margin both increased.
B. Operating profit margin and net profit margin both decreased.
C. Operating profit margin decreased and net profit margin increased.

Question 21
An analyst compiles the following information about a company:

	20X2	**20X3**
ROE	16.7%	17.2%
Total asset turnover	1.06	1.07
Leverage	1.53	1.61

Based on only this information, the *most appropriate* conclusion is that:

A. return on assets increased and net profit margin increased.
B. return on assets decreased and net profit margin increased.
C. return on assets decreased and net profit margin decreased.

Question 22
A company reports the following information:

¥ billions	20X8	20X9
Revenue	8.5	9.3
Net income	3.1	3.3
Gross fixed assets	19.5	22.0
Accumulated depreciation	(3.0)	(3.0)
Net fixed assets	16.5	18.5

Based on this data, fixed asset turnover in 20X9 is *closest* to:
A. 0.19
B. 0.45
C. 0.53

Question 23
A firm reports the following information (in RUB millions):

RUB Millions	Current Year	Prior Year
EBIT	232	216
Net income	186	173
Preferred dividends	10	10
Common equity	3,720	3,460

Based on this data, the current year's return on common equity is *closest* to:
A. 4.90%
B. 5.18%
C. 6.18%

Question 24
An analyst completes the following DuPont analysis on two companies:

	Company X	Company Y
Tax burden	0.75	0.75
Interest burden	0.80	0.80
EBIT margin	0.10	0.18
Asset turnover	0.90	1.20
Leverage	3.00	1.20

Compared with Company Y, Company X *mostly likely* has a:
A. lower ROE and is more efficient.
B. higher ROE and has a higher profit margin.
C. higher ROE and a higher proportion of debt.

Question 25
An analyst gathers the following data for a company:

(¥ billions)	**Prior Year**	**Current Year**
Sales	540	500
Net income	120	100
Average total assets	2,200	2,100

If return on equity (ROE) was 0.12 in the prior year and 0.14 in the current year, then the increase in ROE is *most appropriately* attributed to increased:
A. leverage.
B. efficiency.
C. profitability.

Question 26
An entrepreneur starts a company by investing $300,000 of equity to fund working capital. The entrepreneur makes the following forecast assumptions:

First-year sales	$500,000
Annual sales growth	8%
Net profit margin	30%
Working capital / Sales	80%

Based only on this information, the company's cash balance at the end of the second year is *closest* to:
A. $32,000
B. $50,000
C. $180,000

Question 27
Which of the following is the *best* use of ratio analysis for a company?
A. Analyzing historical profitability ratios to make credit decisions
B. Analyzing current-year liquidity ratios to confirm the company's stock performance
C. Analyzing historical cross-sectional ratio trends to gain insights on the company's relative valuation

Question 28
A manager prepares the following data based on a company's financial statements:

	20X2	20X1
Tax burden	0.70	0.70
Interest burden	1.00	1.00
EBIT margin	0.10	0.16
Asset turnover	1.20	0.75
Leverage	2.00	2.00

Which of the following *best describes* why the return on equity remained constant at 16.8%?
A. The company's efficiency and profitability both improved.
B. The improvement in efficiency is offset by a decline in profitability.
C. Improved profitability matches the decline in the company's efficiency.

Question 29
An analyst collects the following annual data for a company:

	Company	Industry Average
Days of sales outstanding	45.10	30.09
Total asset turnover	1.20	1.15
Days of inventory on hand	25.42	29.77

Which of the following *best describes* how the company's efficiency compares with the industry?
A. The company has a receivable turnover that is better.
B. The company has more effective inventory management.
C. The company produces less revenue for a given asset level.

Question 30
Using DuPont analysis, an analyst compiles the following data for a company:

	20X7	**20X6**	**20X5**
Return on equity	16.7%	16.5%	15.9%
Return on assets	6.0%	6.2%	6.4%

Based only on this information, and assuming revenue and net income were unchanged during this period, the *most appropriate* conclusion is that the company's:
A. leverage increased.
B. total asset turnover increased.
C. average shareholders' equity increased.

Question 31
An analyst gathers the following information on two companies:

($ millions)	Company A	Company B
Cash	100	120
Short-term marketable investments	40	25
Accounts receivable	40	55
Inventory	100	120
Current liabilities	255	275

Based on this information, compared to Company B, Company A *most likely* has a higher:
A. cash ratio.
B. quick ratio.
C. current ratio.

Question 32
Company A's management wishes to increase working capital by lowering the company's average receivable collection period to the industry average. Data for Company A is below:

(EUR *millions*)	Company A
Days sales outstanding (DSO)	23 days
20X7 credit sales	100
20X8 estimated credit sales	125

To match the industry average days sales outstanding (DSO) of 17 days, the change (in €) in the average daily accounts receivable (AR) balance from 20X7 to 20X8 is *closest* to:
A. −1,534,527
B. −479,452
C. 1,918,159

Question 33
An analyst obtains the following information for three companies:

Selected Financial Data			
	Company A	Company B	Company C
Daily cash expenditures	50,000	50,000	50,000
Current liability	1,500,000	1,500,000	1,500,000
Cash ratio	0.7	0.9	0.8
Quick ratio	1.2	1.0	1.1
Current ratio	1.5	2.0	2.5

Which of the three companies is *most likely* to meet its daily cash expenditures?
A. Company A
B. Company B
C. Company C

Question 34
An analyst calculates the following ratios for a company to assess performance over time:

Ratio	20X4	20X5	20X6
Debt-to-equity	0.42	0.35	0.33
Debt-to-EBITDA	4.12	3.18	3.04
Working-capital turnover	0.64	0.59	0.54
Fixed-asset turnover	0.25	0.18	0.16
Price-to-book	8.41	8.05	7.85
Price-to-earnings	12.52	11.12	10.79

Based on this information only, the analyst can *most appropriately* conclude that the company's:
A. solvency position has improved.
B. operation has increased efficiency.
C. stock is more expensive relative to fundamentals.

Question 35
An analyst calculates the following ratios using a company's financial statements:

	20X2	20X1
Fixed charge coverage	2.50	2.00
Interest coverage	3.10	2.40
Debt-to-asset	0.40	0.50
Debt-to-equity	0.90	1.10

Which of the following *best describes* the change in the company's solvency?

A. Relative debt levels and the ability to pay interest improved.
B. Relative debt levels and the ability to pay interest deteriorated.
C. Relative debt levels deteriorated and the ability to pay interest improved.

Question 36

An analyst gathers the following data to compare two companies' performance.

($ millions)	Company A	Company B
Revenue	1,000	800
EBITDA	200	250
Net income	150	188
Long-term debt	700	800
Total assets	1,200	1,600

The analyst calculates only three ratios: Debt-to-EBITDA, net profit margin, and total asset turnover. Based only on these three ratios, the analyst can *most appropriately* conclude that Company A has better:

A. solvency.
B. efficiency.
C. profitability.