Topic Overview	
Topic	BAFS Elective Part – Business Management Module – Financial Management M01: Financial Analysis – Ratio Analysis for Business
Level	S5 / S6
Duration	2 lessons (40 minutes per lesson)

Learning Objectives:

1. To understand the basic concept of accounting ratios and their formula;
2. To calculate accounting ratios from financial statements;
3. To assess business performance with a range of accounting ratios; and
4. To apply their accounting ratio knowledge in real life situations.

Overview of Contents:

Lesson 1	Basic Concept, Classification and Calculation of Accounting Ratios
Lesson 2	Assessing Business Performance with Accounting Ratios

Resources:

Â Topic Overview and Teaching Plan
Â PowerPoint Presentation
Â Student Worksheet

Suggested Activities:

Â Group Discussion
Â Problem Solving

Lesson 1	
Theme	Basic Concept, Classification and Calculation of Accounting Ratios
Duration	40 minutes

Expected Learning Outcomes:

Upon completion of this lesson, students will be able to:

1. Understand the basic concept of accounting ratios and their formula;
2. Classify accounting ratios into three major categories; and
3. Calculate accounting ratios from financial statements.

Teaching Sequence and Time Allocation:

Activities	Reference	Time Allocation
Part I: Introduction		
Õ Elaborate on the concept of accounting ratios; the definition and uses of 12 accounting ratios will be discussed. Õ The two lessons are connected by team games which generate scores and will be accumulated throughout the 2 lessons to determine the final winner.	PPT#1 – 8	5 minutes
Part II: Content		
Õ **Activity 1 – Accounting ratio formula** Â Divide students into teams of 4 - 5 students. Ask them to form ratios by combining the paper stripes cut out from Student Worksheet pp.1-8, and then paste them on a large piece of paper (A1 or A0) under the appropriate category of ratio. Â Record the time used by teams in completing the task and paste students' completed work on the whiteboard. Â Verify answers with students. The team producing the most correct answers wins the game. The champion gets 3 scores, first runner-up 2 scores and second runner-up 1 score. If two teams tie,	PPT#9 – 10 Student Worksheet pp. 1 - 9	15 minutes

the fastest team wins.		
Õ **Activity 2 – Finding ratios from financial statements** Â Teams are given the financial statements of two companies. They must calculate the required accounting ratios with the data given in the statements. Â Upon completion, teams exchange worksheets to check results. Teacher verifies each answer with teams. Each correct answer generates one score. Õ For more capable students an extended activity is available. They are asked to comment on the financial performance of the two companies in **Activity 2.**	PPT#11 – 13 Student Worksheet pp. 10 – 14 PPT#14	15 minutes
Part III: Conclusion		
Õ Announce the accumulated scores for each team and the winning team. Õ Conclude the lesson by recapping the use, classification and calculation of accounting ratios.	PPT#15	5 minutes

Lesson 2	
Theme	Assessing Business Performance with Accounting Ratios
Duration	40 minutes

Expected Learning Outcomes:

Upon completion of this lesson, students will be able to:

1. Compare the performances of different companies based on ratio analysis; and
2. Apply the knowledge on accounting ratios in daily life.

Teaching Sequence and Time Allocation:

Activities	Reference	Time Allocation
Part I: Introduction		
Õ Revision on different uses of accounting ratios in comparing performance of different companies.	PPT#16 – 20	5 minutes
Part II: Content		
Õ **Activity 3 – Which company performed better?** Â Teams are provided with the accounting ratios of two Companies 1 and 2. Students have to determine which company performed better and give reasons. Â Ask each group to share their views with the class before teacher offers the correct answers. Each pair of correct answers earns one score.	PPT#21 – 23 Student Worksheet p. 15	15 minutes
Õ **Activity 4 – Which company are they talking about?** Â Each team is provided with 3 sets of statements (X, Y and Z) and a dialogue between two suppliers. Based on the dialogue, teams are required to match the statements with the 3 companies (A, B and C) mentioned in the dialogue. Â After 10 minutes, record the answers of each team and invite students to explain their answers. Â Verify team answers and give 3 scores for all correct matches, 2 scores with 2 correct matches,	PPT#24 – 26 Student Worksheet pp. 16 - 21	15 minutes

and so on. Â Record team scores and calculate the accumulated score of each team.		
Part III: Conclusion		
Õ Announce the final score and appraise the winning team Õ Conclude the session by reviewing the key concepts covered in the unit.	PPT#27	5 minutes

BAFS Elective Part
Business Management Module – Financial Management

Topic M01:
Financial Analysis –
Ratio Analysis for Business

Technology Education Section
Curriculum Development Institute
Education Bureau, HKSARG
April 2009

Introduction

This session aims to introduce to students the concepts of ratio analysis of a business. Students will be able to build a solid understanding on this topic through active participation in various activities.

Duration

Two 40-minute lessons

Contents

Lesson 1 – Basic Concept, Classification and Calculation of Accounting Ratios

Lesson 2 – Assessing Business Performance with Accounting Ratios

Accounting Ratios

Usage: to evaluate and compare the financial performance and position of different companies

Categories:

Profitability ratios | Liquidity ratios | Management Efficiency ratios

Lesson 1

Teacher begins the lesson by recapping the basic concept and formula of accounting ratios. The two activities in this lesson are designed to arouse the interest of students in learning accounting ratios and therefore these activities are relatively easy when compared to those in lesson two.

Teacher explains that accounting ratios are generated from financial statements which are then used to evaluate and compare the financial performance and financial position of different companies.

There are mainly three categories of accounting ratios:

1. Profitability ratios
2. Liquidity ratios
3. Management efficiency ratios

Profitability Ratios

To measure the ability of a company in making profits.

$$1.\ \text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}}$$

$$2.\ \text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}}$$

Profitability ratios measure the ability of a company in generating profits. This information helps stakeholders e.g. investors, suppliers, customers etc. select companies which have good profit earning performance.

The major profitability ratios are:

1. Gross Profit Ratio

A ratio measuring how much gross profit a company has gained in the accounting period per unit net sales made.

2. Net Profit Ratio

A ratio measuring how much net profit a company has gained in the accounting period per unit net sales made.

Profitability Ratios

$$3.\ \text{Return on Capital Employed} = \frac{\text{Net Profit}}{\text{Capital Employed}^*}$$

$$4.\ \text{Return on Total Asset} = \frac{\text{Net Profit}}{\text{Total Assets}}$$

**Remarks: Capital = (Opening Capital + Closing Capital) / 2*
For limited company, Capital = Equity + Long Term Liabilities

3. Return on Capital Employed

A ratio measuring how much net profit a company has gained in the accounting period per unit capital the company has employed.

4. Return on Total Assets

A ratio measuring how effectively a company uses its total assets to generate earnings.

Remarks:

The four ratios measure profit making ability of a company in different perspectives. Gross (Net) Profit Margin measures a company's ability of making gross (net) profit based on a dollar of net sales the business has made. On the other hand, Return on Capital Employed and Return on Total Assets measure a company's ability of making net profit based on capital used and total assets used respectively.

For all of the profitability ratios, the higher the better.

Liquidity Ratios

To measure the abilities of a company in repaying debts.

$$1.\ \text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$2.\ \text{Quick Ratio} = \frac{\text{Current Assets - Stock}}{\text{Current Liabilities}}$$

Liquidity Ratios are used to measure a company's ability to repay debts in the short run.

The major Liquidity Ratios are:

1. Current Ratio

A ratio measuring the current assets a company has to cover its current liabilities.

2. Quick Ratio

A ratio measuring how much highly liquid asset (current asset less stock) a company has to cover its current liabilities. The reason why stock is subtracted from the current assets is because people argue that it may not be easy to sell stock in a short time and it should not be considered a readily available source to cover short term liabilities. This is regarded as a more stringent version of liquidity ratios.

Remarks:

Imagine if a company has $100 of debt to be settled soon (current liability), the company has to use $100 of its current assets e.g. cash at bank, cash collected from debtors and cash from selling off inventories to cover its debts. If the company does not have enough current assets to cover its current liabilities, it may be forced to sell off its fixed assets, or introduce more equity or long term debts and these may have serious impacts on the future performance of the company. If these tactics do not work, the company may be forced to wind up! Since a dollar of current liability requires a dollar of current assets to cover it, the numerator in a liquidity ratio should be at least as large as the denominator. <u>As a rule of thumb, the current ratio should be at least 2:1 and quick ratio should be at least 1:1 for safety</u>.

Management Efficiency Ratios

To measure the efficiency of a company in controlling stocks, debtors and creditors.

$$1.\ \underset{\text{(times)}}{\text{Stock Turnover Ratio}} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}^{\#}}$$

$$2.\ \underset{\text{(days)}}{\text{Stock Turnover Period}} = \frac{\text{Average Stock}^{\#}\text{X365}}{\text{Cost of Goods Sold}}$$

#Remarks: Average Stock = (Opening Stock + Closing Stock) / 2

Management Efficiency Ratios are used to measure the management's efficiency in controlling stocks, debtors and creditors.

The major Management Efficiency Ratios are:

1. Stock Turnover Ratio, unit = time(s)

A ratio measuring how many times the stock is turned over (or sold) in an accounting period. It indicates how well inventory is managed. A high turnover is generally viewed as positive. The quicker stock is turned over, the greater the sales and the greater the profits, given a fixed profit ratio.

2. Stock Turnover Period, unit = day(s)

A ratio measuring the time, in terms of days, required to sell the stock. The shorter the turnover period, the quicker the stock is sold, which means, greater sales and profits achieved with constant profit ratios. Hence, a shorter stock turnover period is generally more preferable.

Management Efficiency Ratios

$$\text{3. Debtors Turnover Ratio}\underset{\text{(times)}}{} = \frac{\text{Sales}}{\text{Debtors}}$$

(times)

$$\text{4. Debtors Collection Period} = \frac{\text{Debtors x 365}}{\text{Sales}}$$

(days)

3. Debtors Turnover Ratio, unit = time(s)

A ratio measuring the number of times debtors turn over during the accounting period. Higher turnover indicates a shorter time between sales and cash collection. It reflects the effectiveness of a company's payment terms.

A low ratio may indicate the company is offering lenient payment terms or having difficulty in collecting debts, which will adversely affect the cash flow. Generally, the greater this ratio the better. When debts are recovered quicker, there will be more cash in hand. However, these ratios vary significantly depending on the nature of the business and the products being sold. So, it is useful to compare this ratio with industry averages.

4. Debtors Collection Period, unit = day(s)

A ratio measuring the time, in terms of days, required to collect the debts.

Generally, the shorter this ratio the better – i.e. Debts being recovered in shorter time means more cash at hand.

Management Efficiency Ratios

$$\text{5. Credtiors Turnover Ratio} = \frac{\text{Purchases}}{\text{Creditors}}$$

(times)

$$\text{6. Credtiors Repayment Period} = \frac{\text{Credtiors} \times 365}{\text{Purchases}}$$

(days)

5. Creditors Turnover Ratio, unit = time(s)

A ratio measuring how many times a payable is turned over in the accounting period.

A high turnover implies a relatively short time between purchase and payment settlement, and this may indicate the company is not taking full advantage of the credit periods. However, a low creditor turnover could result from a shortage of cash in the business.

6. Creditors Repayment Period, unit = day(s)

A ratio measuring the average time, in terms of days, required to repay the debts.

A long repayment period may indicate the difficulties that a company is facing in paying debts and the loss of creditor discounts for not paying back on time.

Remarks:

Someone may measure the stock turnover period, debtors collection period and creditors repayment period in terms of month or year; if so, the 365 in the formula should be changed to 12 or 1 respectively.

Activity 1:
Accounting ratio formula

Use the paper stripes provided to complete the following table:

Categories	Ratio Formula
Profitability Ratios: measure the ability to make ________	________ ________ ________ ________
________________: measure the ability to repay debts	________ ________
Management Efficiency Ratios: measure the ability to control ______ and debtors etc.	________ ________ ________ ________ ________ ________

Activity 1:

The objective of the game is to ‘warm up’ the students with a relatively easy activity and arouse their interest in calculating accounting ratios. Students are asked to complete the activity without looking into any reference materials.

Steps:

1. Divide students into teams of 4-5 students that will remain the same throughout the two lessons.
2. Provide each team with a set of Student Worksheets p.1-p.9. Teacher should copy p.1-p.8 on one side only and p.9 should be produced in a large piece of paper in A1 or A0 size.
3. Students should cut off the paper stripes from p.1-p.8 and use them to form different accounting ratios, then paste them on Student Worksheet p.9 (in A1 or A0 size) with the three categories of accounting ratios stated.

Activity 1:
Accounting ratio formula
(Answers)

Categories	Ratio Formula	
Profitability Ratios: measure the ability to make profit	$\frac{\text{Gross Profit}}{\text{Net Sales}}$ $\frac{\text{Net Profit}}{\text{Capital Employed}}$	$\frac{\text{Net Profit}}{\text{Net Sales}}$ $\frac{\text{Net Profit}}{\text{Total Assets}}$
Liquidity Ratios: measure the ability to repay debts	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{\text{Current Assets - Stock}}{\text{Current Liabilities}}$
Management Efficiency Ratios: measure the ability to control stock and debtors etc.	$\frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$ $\frac{\text{Credit Sales}}{\text{Debtors}}$ $\frac{\text{Credit Purchases}}{\text{Creditors}}$	$\frac{\text{Average Stock x 365}}{\text{Cost of Goods Sold}}$ $\frac{\text{Debtors x 365}}{\text{Credit Sales}}$ $\frac{\text{Creditors x 365}}{\text{Credit Purchases}}$

Steps (cont’d):

4. Paste students’ completed work on the whiteboard and verify answers with students.
5. The team producing the most correct answers wins the game, the champion gets 3 scores, first runner-up 2 scores and second runner-up 1 score.
6. If two teams tie, the fastest team wins.
7. Record the scores for each team. The team scores are accumulative throughout the two lessons.

To make the game more challenging, students could be asked to compete in answering the questions.

Activity 2: Finding ratios from financial statements

Based on the financial statements provided, fill in the following table:

	Funny Company Limited	Tricky Company Limited
Gross Profit Ratio		
Net profit Ratio		
Return on Capital Employed		
Return on Total Assets		
Current Ratio		
Quick Ratio		
Stock Turnover Ratio		
Stock Turnover Period		
Debtors Turnover Ratio		
Debtors Collection Period		
Creditors Turnover Ratio		
Creditors Repayment Period		

Activity 2:

The objective of the game is to develop students' skills in extracting correct figures from statements to form ratios. Since different companies will use different account names and format of presentation, it is important for students to know which accounts to extract for ratio calculations.

Steps:

1. Ask teammates to sit together.
2. Teams are given the financial statements of two companies. They must determine the required accounting ratios from the statements.
3. Upon completion, teams exchange worksheets to check results.
4. Each correct answer will generate one score.
5. Verify each answer with teams and record their scores. Team scores are accumulative throughout the two lessons.

Activity 2: Finding ratios from financial statements (Answers)

Ratio	Formula	Funny Company Limited	Tricky Company Limited
Gross Profit Ratio	Gross Profit / Net Sales	319500/700000 = **0.46**	7500/11000 = **0.68**
Net profit Ratio	Net Profit / Net Sales	184500/700000 = **0.26**	5600/11000 = **0.51**
Return on Capital Employed	Net Profit / Capital Employed	184500/1105000 = **0.17**	5600/307000 = **0.02**
Return on Total Assets	Net Profit / Total Assets	184500/1290000 = **0.14**	5600/309000 = **0.02**
Current Ratio	Current Assets / Current Liabilities	190000/185000 = **1.03**	9000/2000 = **4.5**
Quick Ratio	Current Assets – Stock / Current Liabilities	180000/185000 = **0.97**	8000/2000 = **4**

The answers for Activity 2 are shown in the above table. Formula and calculations are displayed for easy reference.

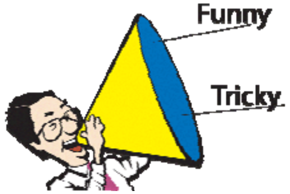
Activity 2: Finding ratios from financial statements (Answers)

Ratio	Formula	Funny Company Limited	Tricky Company Limited
Stock Turnover Ratio	Cost of Goods Sold / Average Stock	380500/[(30500+10000)/2] = **18.79**	3500/[(1500+1000)/2] = **2.8**
Stock Turnover Period	Average Stock x 365 / Cost of Goods Sold	[(30500+10000)/2]x365/380500 = **19.43 days**	[(1500+1000)/2]x365/3500 = **130.36 days**
Debtors Turnover Ratio	Credit Sales / Debtors	700000/150000 = **4.67**	11000/5000 = **2.2**
Debtors Collection Period	Debtors x 365 / Credit Sales	150000x365/700000 = **78.21 days**	5000x365/11000 = **165.91 days**
Creditors Turnover Ratio	Credit Purchases / Creditors	360000/180000 = **2**	3000/2000 = **1.5**
Creditors Repayment Period	Creditors x 365 / Credit Purchases	180000x365/360000 = **182.50 days**	2000x365/3000 = **243.33 days**

The answers for Activity 2 are shown in the above table. Formula and calculations are displayed for easy reference.

Extended Learning Activity

Can you give brief comments on the financial performance of Funny and Tricky?



This is an extended learning activity for more capable students.

After checking the answers of Activity 2 with students, teacher may ask students to give brief comments on the financial performance of the two companies – Funny and Tricky.

Teacher should remind students that the accounting ratios in Activity 2 can help them compare the financial performance of the two companies.

Extra scores should be given to the groups who can give reasonable comments with justification.

To guide students thinking, teacher may ask students the following questions:

Q1. Which company has higher ability to gain profit from its sales revenue?

Ans. Tricky Company Limited.

Q2. Which company has higher ability to repay debts?

Ans. Tricky Company Limited.

Q3. Which company has higher efficiency in controlling stock?

Ans. Funny Company Limited.

further elaboration will be covered in the next lesson.

BAFS Elective Part – Business Management Module – Financial Management
Topic M01: Financial Analysis – Ratio Analysis for Business

Activity 1: Accounting ratio formula
Cut along the dotted lines and produce paper stripes for the formation of accounting ratios.

Net Sales

Total Assets

Capital Employed

Net Profit

Net Sales

Current Assets

Current Assets – Stock

Average Stock

Credit Sales

Credit Purchases

Creditors

Profit

Net Profit

Current Liabilities

Debtors

Gross Profit

Cost of Goods Sold

Current Liabilities

Creditors

Cost of Goods Sold

Debtors

Stock

Liquidity Ratios

Net Profit

Average Stock

Credit Sales

Credit Purchases

X 365	X 365
X 365	X 365

Activity 1: Accounting ratio formula

Categories	Ratios
Profitability Ratios: measure the ability to make ________	____________ ____________ ____________ ____________
________________________: measure the ability to repay debts	____________________ ____________________
Management Efficiency Ratios: measure the ability to control __________ and debtors etc.	____________ ____________ ____________ ____________ ____________ ____________

Activity 2: Finding ratios from financial statements
Fact Sheet 2A

Funny Company Limited
Trading and Profit and Loss Account for the year ended 31 December 20XX

		$	$
Sales			707,000
Less:	Returns Inwards		7,000
Net sales			700,000
Less:	Cost of Goods Sold		
Opening Inventory		30,500	
	Add: Purchases	360,000	
		390,500	
	Less: Closing Inventory	10,000	380,500
Gross Profit			319,500
Add:	Revenues		
	Discounts received		30,000
			349,500
Less:	Expenses		
	Provision for depreciation of machineries	20,000	
	Bad debts	5,000	
	Discounts allowed	10,000	
	Debenture interest	10,000	
	Salaries	120,000	165,000
Net Profit			184,500
Add:	Retained profit brought forwards		50,000
			234,500
Less:	Appropriations		
	Transfer to general reserve	19,500	
	Preference share dividend	5,000	
	Ordinary share dividend	10,000	34,500
Retained profit carried forwards			200,000

Activity 2: Finding ratios from financial statements
Fact Sheet 2B

Funny Company Limited
Balance Sheet as at 31 December 20XX

	Cost	Provision for depreciation	Net Book Value
Fixed Assets	$	$	$
Machineries	1,800,000	700,000	1,100,000
Current Assets			
Inventory		10,000	
Debtors		150,000	
Cash		30,000	
		190,000	
Less: Current Liabilities			
Trade creditors	180,000		
Accrued interest	5,000	185,000	
Net current assets			5,000
			1,105,000
Financed by:			
Capital	Authorized	Issued	
Ordinary shares	500,000	80,000	
Preference shares	200,000	50,000	130,000
	700,000		
Reserves			
Share premium		50,000	
General reserve		45,000	
Retained profit		200,000	
Dividend		15,000	310,000
Shareholders' Equity			440,000
Long Term Liabilities			
Debenture			665,000
			1,105,000

Activity 2: Finding ratios from financial statements
Fact Sheet 2C

Tricky Company Limited
Trading and Profit and Loss Account for the year ended 31 December 20XX

		$	$	$
Sales				12,000
Less:	Returns Inwards			1,000
Net sales				11,000
Less:	Cost of Goods Sold			
Opening Stock			1,500	
	Add: Purchases		3,000	
			4,500	
	Less: Closing stock		1,000	3,500
Gross Profit				7,500
Add:	Revenues			
	Discounts received			100
				7,600
Less:	Expenses			
	Provision for depreciation of equipment		200	
	Bad debts		100	
	Discounts allowed		200	
	Salaries		1,500	2,000
Net Profit				5,600
Add:	Retained profit brought forwards			50,000
				55,600
Less:	Appropriations			
	Preference share dividend		1,000	
	Ordinary share dividend			
	Interim	1,500		
	Final	1,500	3,000	4,000
Retained profit carried forwards				51,600

Activity 2: Finding ratios from financial statements
Fact Sheet 2D

Tricky Company Limited
Balance Sheet as at 31 December 20XX

	Cost	Provision for depreciation	Net Book Value
Fixed Assets	$	$	$
Equipment	800,000	500,000	300,000
Current Assets			
Stock		1,000	
Net debtors		5,000	
Cash		3,000	
		9,000	
Less: Current Liabilities			
Trade creditors		2,000	
Net current assets			7,000
			307,000
Financed by:			
Capital	Authorised	Issued	
Ordinary shares	150,000	50,000	
Preference shares	50,000	10,000	60,000
	200,000		
Reserves			
Share premium		10,000	
Retained profit		234,500	
Dividend		2,500	246,500
Balance as at 31 December 20XX			307,000

Activity 2: Finding ratios from financial statements

Calculate the accounting ratios of the two companies with your group members and complete the following table.

	Formula	Funny Company Limited	Tricky Company Limited
Gross Profit Ratio			
Net profit Ratio			
Return on Capital Employed			
Return on Total Assets			
Current Ratio			
Quick Ratio			
Stock Turnover Ratio			
Stock Turnover Period			
Debtors Turnover Ratio			
Debtors Collection Period			
Creditors Turnover Ratio			
Creditors Repayment Period			

Remarks: After all students finished their worksheets, each team should exchange its worksheet with another team for correction. Verify the answers with the teacher. Each correct answer generate one score.

Activity 3: Which company performed better?

Which company performed better, 1 or 2?

Complete the following table with your group members and decide which company performed better.

Ratios	Ratio Values		Which is better, 1 or 2?	Reasons
	Company 1	Company 2		
Gross Profit Ratio	0.31	0.25		
Net profit Ratio	0.12	0.15		
Return on Capital Employed	0.21	0.24		
Return on Total Assets	0.11	0.19		
Current Ratio	2.54 : 1	1.47 : 1		
Quick Ratio	1.12 : 1	1.30 : 1		
Inventory Turnover Ratio	4.5 times	3.8 times		
Inventory Turnover Period	81.11 days	96.05 days		
Debtors Turnover Ratio	4.66 times	3.98 times		
Debtors Collection Period	78.33 days	91.71 days		
Creditors Turnover Ratio	3.78 times	2.56 times		
Creditors Repayment Period	96.56 days	142.58 days		

Activity 4: Which company are they talking about? Fact Sheet 4A

Based on the following dialogue between two suppliers Joseph and Yuri of companies A, B and C, determine which company X, Y and Z statements belong to.

Yuri: Hey! How are you Joseph?

Joseph: Oh! Yuri! I could not be better; how about you?

Yuri: Not bad except for some issues with our customer Company A.

Joseph: What's the issue?

Yuri: Company A did not pay their bills on time. As you know, in our industry, the credit period is usually 30 days. However, Company A did not pay even in 40 days!

Joseph: Yea! I think we are experiencing the same situation! Our clients also delayed payment creating pressure on our cash flow. Are you worrying about Company A's ability to pay their bills? They have a double digit Gross Profit Ratio, although only a single digit profit ratio if expenses are subtracted from the gross profit.

Yuri: Hmm… I think a better way to estimate their ability to pay is to determine the extent their current assets cover current liabilities. I know that Company A's Current Ratio is far exceeding the safety range of 2:1. Even though we exclude the inventory from the calculation, the ratio is still good.

Joseph: It's true. We need not worry about that at least in the short run. But, in the long run, I am concerned about the company's management efficiency. It can only make $3 net profits for every $100 of capital used. The other companies, B and C, both have double digit returns.

Yuri: Well, if the management doesn't change their direction, Company A will probably be excluded from the market. For example, they should review their inventory control. Company A's inventory, like that of Company B, was in the warehouse for more than 4 months on average.

Joseph: Yea, short holding period is so important for their products that go obsolete quickly…

Activity 4: Which company are they talking about?
Fact Sheet 4B

Statement X

Trading and Profit and Loss Account for the year ended 31 December 20XX

	$	$	$
Sales			707,000
Less: Returns Inwards			7,000
			700,000
Less: Cost of Goods Sold			
Opening Inventory		30,500	
Purchases	360,000		
Less: Returns Outwards	10,000		
		350,000	
Add: Carriage Inwards		4,000	
		384,500	
Less: Closing Inventory		36,500	348,000
Gross Profit			352,000
Other Income			
Discounts received		30,000	
Rent received		20,300	
Reduction in provision in doubtful debts		200	50,500
			402,500
Less: Expenses			
Wages and Salaries		74,000	
Insurance		4,000	
Rent and rates		140,000	
Loan interest		3,000	
Carriage outwards		5,000	
Discounts allowed		17,000	
Advertising expenses		40,000	
Bad Debts		2,000	
Provision for depreciation – Equipment		36,000	
Provision for depreciation – Motor vehicles		16,500	337,500
Net profit for the year			65,000

Activity 4: Which company are they talking about?
Fact Sheet 4C

Statement X

Balance Sheet as at 31 December 20XX

	$	$	$
Fixed Assets	Cost	Accumulated Depreciation	Net Book Value
Equipment	180,000	70,160	109,840
Motor vehicles	70,000	31,500	38,500
	250,000	101,660	148,340
Current Assets			
Inventory		36,500	
Trade debtors	150,000		
Less: Provision for doubtful debts	4,500	145,500	
Prepayments		1,000	
Cash		3,000	
		186,000	
Current Liabilities			
Trade creditors	120,000		
Accrued expenses	2,000		
Bank overdraft	10,500	132,500	
Net Current Assets			53,500
			201,840
Loan-term Liabilities			
Bank loan			60,000
			141,840
Financed by:			
Capital			
Balance as at 1 January 20XX			109,840
Add: Net profit for the year			65,000
			174,840
Less: Drawings			33,000
Balance as at 31 December 20XX			141,840

Activity 4: Which company are they talking about?
Fact Sheet 4D

Statement Y

Trading and Profit and Loss Account for the year ended 31 December 20XX

	$	$
Sales		795,000
Less: Cost of sales		
Opening Stock	200,000	
Purchases (credit purchases $602,500)	652,500	
	852,500	
Less: Closing stock	230,000	
		622,500
Gross Profit		172,500
Less: Expenses		
Debenture interest	18,000	
Depreciation	37,500	
Other expenses	87,000	
		142,500
Net profit		30,000
Dividend proposed		19,500
Retained profit for the year		10,500
Retained profits brought forward from last year		118,000
Retained profits carried forward to next year		128,500

Statement Y

Balance Sheet as at 31 December 20XX

Fixed Assets		
Property, plant and equipment	715,000	715,000
Current Assets		
Inventories	230,000	
Trade debtors	175,500	
Bank	157,500	563,000
Less Current Liabilities		
Trade creditors	75,000	
Accrued expenses	30,000	(105,000)
		1,173,000
Capital		
Share capital	500,000	
General reserve	300,000	
Accumulated profits	128,500	
Debentures	225,000	
Proposed dividend	19,500	1,173,000

Activity 4: Which company are they talking about?
Fact Sheet 4E

Statement Z

Trading and Profit and Loss Account for the year ended 31 December 20XX

	$	$
Sales (credit sales $67,000)		80,000
Less : Cost of Goods Sold		
Opening Inventory	25,000	
Purchases	50,000	
	75,000	
Closing Inventory	(15,000)	(60,000)
Gross Profit		20,000
Less: Bank Interest	1,000	
Other Expenses	7,000	(8,000)
Net Profit		12,000

Statement Z

Balance Sheet as at 31 December 20XX

Fixed Assets		
Plant and Machinery, at cost	10,000	
Provision for Depreciation	(8,000)	2,000
Current Assets		
Inventory	15,000	
Trade Debtors	25,000	
Cash	6,000	46,000
Current Liabilities		
Trade Creditors	5,000	
Bank Overdraft	1,000	(6,000)
		42,000
Capital		
Balance as at 1 January 20XX		36,000
Net Profit		12,000
		48,000
Drawings		(6,000)
		42,000

Activity 4: Which company are they talking about?

You may find the following table could help your analysis:

	X	Y	Z
Gross Profit Ratio			
Net profit Ratio			
Return on Capital Employed			
Return on Total Assets			
Current Ratio			
Quick Ratio			
Inventory Turnover Ratio			
Inventory Turnover Period			
Debtors Turnover Ratio			
Debtors Collection Period			
Creditors Turnover Ratio			
Creditors Repayment Period			

Statement X belongs to Company ________.
Statement Y belongs to Company ________.
Statement Z belongs to Company ________.