

CSS - 2023 | Business Administration | Assignment | For CSS - 2023 Only

CSS - 2002

The following data apply to A.L. Kaiser & Company (millions of dollars)

Cash and marketable securities \$100.00
Fixed assets \$283.50
Sales \$1000.00
Net income \$50.00
Quick ratio 2.0 X
Current ratio 3.0 X
Average collection period 40 days
Return on equity 12%

Kaiser has no preferred stock – only common stock equity, current liabilities and long term debt.

Required:

Find Kaiser's

1. Account receivable (A/R)
2. Current liabilities
3. Current assets
4. Total assets
5. Return on assets (ROA)
6. Common stock equity
7. Long term debt

CSS - 2006

Q.5 General Electric Company has annual sales (all on credit) of \$ 1.6 million. Their average collection period is 40 days and they typically have an inventory turnover of 8. Their gross profit margin is 20 percent. Assume, for ease of collection, a 360 day year:

- (a) Calculate the company's accounts receivable.
- (b) Calculate the amount in inventory. (10+10)

CSS – 2003

(b) Assuming that current ratio is 2. State in each of the following cases, whether the ratio will improve, or decline, or have no change:

- (i) Payment of current liabilities
- (ii) Purchase of fixed assets
- (iii) Cash collected from customers
- (iv) Issue of new shares

(c) A corporation has total assets of Rs. 500,000 and its equity is Rs. 200,000. what is the Company's debt-to-total asset ratio?

CSS - 2023 | Business Administration | Assignment | For CSS - 2023 Only

CSS -2004

(a) Why might it be possible for a company to make large operating profits, yet still be unable to meet debt payments when due? What financial Ratios might be employed to detect such a situation?

CSS- 2005

6. Royal corporation current assets inventories and current liabilities for four year period are as follows:

Item	2000	2001	2002	2003
Current assets	Rs. 20,000	Rs. 22,400	Rs. 25,600	Rs. 28,100
Inventories	Rs. 8,200	Rs. 10,000	Rs. 12,500	Rs. 14,000
Current liabilities	Rs. 10,000	Rs. 10,200	Rs. 10,700	Rs. 11,000

- a. Calculate the firm's current and quick ratios for each year. (10)
b. Discuss the firm's liquidity position over the four year period of time. (10)

CSS-2015 (A & A)

Acne Plumbing Company's balance sheet of year 2011: (20)

<u>Assets</u>	<u>Rs.</u>	<u>Liabilities</u>	<u>Rs.</u>
Cash	30,000	Accounts payable	230,000
Accounts receivable	200,000	Accruals	200,000
Inventory	400,000	Bank loan	100,000
Net fixed assets	800,000	Long term debt	300,000
		Common stock	100,000
		Retained earning	500,000
Total assets	1,430,000	Liabilities and stock holders equity	1,430,000

Further information: Sales were Rs. 4,000,000/-,
Cost of Goods sold were Rs. 3,200,000/-Net Profit was Rs. 300,000/-

Required: Compute the following ratios:

1. Current ratio, 2. Acid test ratio, 3. Average collection period,
4. Inventory turnover, 5. Total debt/equity,
6. Long term debt/Gross profit margin, 7. Net profit margin,
8. Total assets turnover, 9. Return on assets.

CSS – 2007 (A & A)

Question.2. Following information is developed from the accounting records of Sana Chemicals Limited:

- (1) Current Ratio = 2.5
- (2) Liquid Ratio = 1.5
- (3) Proprietary Ratio = 0.75 (equity / fixed asset)
- (4) Working Capital = Rs.150,000
- (5) Reserves and Surplus = Rs.100,000
- (6) Bank Overdraft (Current Liability) = Rs. 25,000

Required: Find out Current Assets, Current Liabilities, Stock, Liquid Assets and Fixed Assets.

CSS – 2009 (A & A)

Question No.3. Complete the 2007 balance sheet for Premier Industries using the information that follows it.

Premier Industries
Balance Sheet at December 31, 2007

Cash	30,000	Accounts Payable	120,000
Marketable securities	25,000	Notes Payable	---
Accounts receivable	---	Accruals	20,000
Inventories	---	Long-term debt	---
Net fixed assets	---	Stockholders' equity	600,000

The following financial data for 2007 are also available:

- 1) Sales totaled Rs. 1,800,000
- 2) The gross profit margin was 25 percent
- 3) Inventory turnover was 6.0.
- 4) There are 360 days in the year.
- 5) The average collection period was 40 days.
- 6) The current ratio was 1.60.
- 7) The total asset turnover ratio was 1.20
- 8) The debt ratio was 60 percent.

CSS-2012 (A & A)

Q. 8. (A) You have the following information on BB Corp.:

- Current ratio 2.0
- Quick ratio 1.4
- Current liabilities Rs. 100,000
- Inventory turnover 6 x
- Gross profit margin 0.20

Given these figures, calculate the firm's sales. (09)

CSS-2016 (A & A)

Rabika Limited has the following balance sheet and income statement for 2015 (in thousands rupees)

Balance sheet			
Cash	Rs. 400	Accounts payable	Rs. 320
Accounts receivable	1,300	Accruals	260
Inventories	<u>2,100</u>	Short-term loans	<u>1,100</u>
Current assets	3,800	Current liabilities	1,680
Net fixed assets	3,320	Long-term debt	2,000
		Shareholders' equity	3,440
Total assets	<u>7,120</u>	Total liabilities & Equity	<u>7,120</u>

Income Statement	
Net sales (all credit)	Rs. 12,680
Cost of goods sold*	<u>8,930*</u>
Gross profit	Rs. 3,750
Selling, general, and admin expenses	2,230
Interest expense	<u>460</u>
Profit before taxes	Rs. 1,060
Taxes	<u>390</u>
Profit after taxes	Rs. <u>670</u>

* Includes depreciation of Rs. 480

On the basis of this information, compute the following:

- Current ratio
- Acid test ratio
- Average collection period
- Inventory turnover ratio
- Debt to net worth ratio
- Gross profit margin
- Net profit margin
- Rate of return on common stock equity

CSS-2014 (A & A)

Q3: The following is the balance sheet of Shine Company as on December 31, 2013

Liabilities	Rs.	Assets	Rs.
Equity share capital	120000	Fixed assets	360000
Reserves and surplus	80000	Less depreciation	100000
6% mortgage debentures	140000	Current assets :	
Current liabilities:		Cash	10000
Creditors	12000	Investment	30000
Bills payables	20000	Stock	60000
Outstanding expenses	2000	Sundry debtors	40000
Taxation provision	26000		
	400000		400000

Other information: Net sales Rs.600,000; cost of goods sold Rs.516,000;
net income before tax 40,000 , net income after tax 20,000

Required: Calculate current ratio; acid test ratio; debt equity ratio; gross profit ratio and operating ratio.

CSS-2013 (A & A)

Q.3. The following results of a company are available:

(20)

a.	Current Ratio	6 : 1
b.	Quick Ratio	0.50 : 1
c.	Debt Equity Ratio	90 : 10
d.	Collection index	136 days
e.	Time Interest Earned	08 : 1

Required:-

Offer your comments on each of the above regarding their adequacy or otherwise.

CSS-2012 (A & A)

Q. 8. (A) You have the following information on BB Corp.:

Current ratio	2.0	
Quick ratio	1.4	
Current liabilities	Rs.	00,000
Inventory turnover	6 x	
Gross profit margin	0.20	

Given these figures, calculate the firm's sales.

B) Following are the selected data taken from Books of A Ltd at the end of year 2005:

Cash	Rs. 108,000
Account Receivable beg	380,000
Account Receivable end	350,000
Marketable Securities	142,000
Merchandise Inventory beg	120,000
Merchandise Inventory end	150,000
Accounts Payable	200,000
Bills Payable	50,000
Credit Sales (Net)	18,25,000
Cost of Goods Sold	540,000
Total Operating Expenses	600,000

REQUIRED: On the basis of above information, find out:

1. Working Capital	2. Current Ratio	3. Quick Ratio	4. Inventory Turnover
5. Account Receivable Turnover	6. Gross Profit Percentage	7. Net Profit Percentage	8. Operating Expenses Rate

CSS - 2023 | Business Administration | Assignment | For CSS - 2023 Only

CSS-2016 (B.ad)

Q No.5. The following data relates to Bright Star Company (millions of Rs.)

Cash & equivalents	Rs. 100.00
Fixed Assets	283.50
Sales	1000.00
Net Income	50.00
Current Liabilities	105.50
Current Ratio	3.00
Days Sales Outstanding (DSO)	40.55 Days
Return on Equity	12.00%

The company has no Preferred stocks- only Common Equity, Current Liabilities, Long Term Debt.

Find the company's

- (i) Accounts Receivable (ii) Current Assets (iii) Total Assets
(iv) Return on Total Assets (v) Common Equity (vi) Quick Ratio (vii) Long Term Debt
-

CSS- 2008 (B.ad)

How do liquidity and leverage ratios help the management in taking financial decisions? assume some data to explain the roles of these ratios in financial decision Making.

CSS – 2009 (B.ad)

What is ratio analysis? List four ratios and explain what they are used for? Discuss various benefits and drawbacks of ratio analysis? (5+5+10)

CSS 2012 (B.ad)

How the Financial Statements are analyzed and interpreted through ratio analysis. (20)

CSS - 2023 | Business Administration | Assignment | For CSS - 2023 Only

CSS - 2014

Q. The financial statements of Remington Pharmaceuticals for the year ended December 31, 2012, follow:

Remington Pharmaceuticals Income Statement for the Year Ended December 31, 2012

Sales revenue	\$ 160000
<u>Less: Cost of goods sold</u>	<u>106000</u>
Gross profits	\$ 54000
<u>Less Operating expenses</u>	
Selling expense	\$ 16000
General and administrative expenses	10000
Lease expense	1000
Depreciation expense	<u>10000</u>
Total operating expense	\$ 37000
Operating profits	\$ 17000
<u>Less: Interest expense</u>	<u>6100</u>
Net profits before taxes	\$ 10900
<u>Less: Taxes</u>	<u>4360</u>
Net Profits after taxes	\$ 6540

Remington Pharmaceuticals Balance Sheet December 31, 2012

<u>Assets</u>	
Cash	\$ 500
Marketable Securities	1000
Accounts receivable	25000
Inventories	<u>45500</u>
Total Current Assets	\$ 72000
Land	\$ 26000
Building and equipment	\$ 90000
<u>Less: Accumulative depreciation</u>	<u>\$ 38000</u>
Net fixed Assets	\$ 78000
Total Assets	\$ 150000
<u>Liabilities and Stockholder's Equity</u>	
Accounts payable	\$ 22000
Notes payable	<u>47000</u>
Total Current Liabilities	\$ 69000
Long term debt	22950
Common stock equity	\$ 31500
Retained earnings	26550
Total Liabilities and Stockholders Equity	\$ 150000

Book Value
↓
1/6

market value
—

The firm's 3000 outstanding shares of common stock closed 2012 at a price of \$ 25 per share.

a. Use the preceding financial statements to complete the following table. Assume the industry average given in the table are applicable for both 2011 and 2012.

<u>Ratio</u>	<u>Industry average</u>	<u>Actual 2011</u>	<u>Actual 2012</u>
Current ratio	1.80	1.84	----
Quick ratio	0.70	0.78	----
Inventory turnover*	2.50	2.59	----
Average collection period*	37.5 days	36.5 days	----
Debt ratio	65%	67%	----
Times interest earned ratio	3.8	4.0	----
Gross profit margin	38%	40%	----
Net profit margin	3.5%	3.6%	----
Return on total assets	4.0%	4.0%	----
Return on common equity	9.5%	8.0%	----
Market/Book ratio	1.1	1.2	----

* Bases on a 365 days year and on end of year figures.

CSS – 2017

Income Statement	
Sales	Rs.500,000
Cost of Goods sold	300,000
Operating Expense	60,000
Interest Expense	10,000
Income tax expense	40,000
Net income	90,000
Balance Sheet	
Assets	
Cash	Rs.10,000
Account Receivable	15,000
Inventory	20,000
Equipment	455,000
Total	500,000
Liabilities	
Account Payable	12,000
Long-term notes payable	48,000
Shareholder equity	
Capital Stock	300,000
Retained earning	140,000
Total	500,000

Find and interpret the company's

1. Current ratio
2. Quick Ratio
3. Average collection Period
4. Time interest earned
5. Inventory turnover

CSS – 2018

ABC Industries
Balance sheet ending 31,2016

Asset	Rs.	Liabilities and stockholder's equity	Rs.
Cash	32,720	Accounts payable	120,000
Marketable securities	25,000	Notes Payable	-----
Account receivable	-----	Accruals	20,000
Inventory	-----	Total current liabilities	-----
Total Current Asset	-----	Long term debt	-----
Net fixed Asset	-----	Stockholder's equity	600,000
Total Assets	-----	Total Liabilities and stockholder's equity	-----

The following financial data for 2016 is also available

- (a) Sales totaled 1,800,000
- (b) The Gross profit margin was 25%
- (c) Inventory turnover was 6.0
- (d) There are 365 days in the year.
- (e) The average collection period was 40 days
- (f) The current ratio was 1.60
- (g) The total asset turnover ratio was 1.20
- (h) The debt ratio was 60%

Complete the 2016 balance sheet for ABC Industries using the given information

CSS – 2019

Q.No. 6.

An international manufacturing concern has provided the income statement data. Give formulas to calculate the following ratios. Also explain how to interpret them? (20)

- (i) Current ratio
- (ii) Quick ratio
- (iii) Average collection period
- (iv) Time interest earned
- (v) Inventory turnover

CSS – 2020

Q.No. 6. Explain the following Analytical tools of Financial management (05 marks each)

- (a) Time series Analysis versus Cross sectional Analysis
- (b) Horizontal Analysis versus Vertical Analysis
- (c) Liquidity ratios versus Debt ratios
- (d) Turnover ratios versus Profitability Ratios

CSS – 2021

Q.No.3. An international manufacturing concern has provided the income statement data. Give formulas to calculate the following ratios. Also explain how to interpret them? (20)

- (i) Current ratio
- (ii) Quick ratio
- (iii) Average collection period
- (iv) Time interest earned
- (v) Inventory turnover

CSS – 2022

How Ratio Analysis is a useful management tool to improve understanding of financial health for different stake holders including creditors, investors , management ? (20)

Bussiness Administration

Topic: Ratio Analysis

Faiza Saleem

Batch RWP-OB39

CSS 2002

Given data:-

Cash and Marketable Securities	=	\$1000 \$100
Fixed assets	=	\$283.50
Sales	=	\$1000.00
Net income	=	\$50.00
Quick Ratio	=	2.0X
Current Ratio	=	3.0X
Average collection period	=	40 Day
Return on equity	=	12%

1. Account Receivable (AIR)

$$\text{Account Receivable in days} = \frac{365}{\text{AR turnover}}$$

$$\text{AR in days} = \frac{365}{(\text{Sales} / \text{AR})}$$

$$40 = 365 \cdot \frac{\text{AR}}{\text{Sales}}$$

$$40 = 365 \cdot \left(\frac{\text{AR}}{1000} \right)$$

$$\text{AR} = (1000 \times 40) / 365$$

Current Liabilities:-

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$
$$3.0 = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$\text{Current Assets} = \$100.00$$

~~Total~~ **Total Assets:-**

$$\text{Total Assets} = \text{Non fixed Ass} + \text{Fixed Ass}$$
$$= \$283.50 + \$100.00$$
$$= \$383.50$$

Return on assets (ROA)

$$\text{ROA} = \frac{\text{Net income}}{\text{Total Assets}}$$
$$= \frac{50\$}{383.5\$}$$

Common Stock equity.

$$\text{Return on Equity} = \frac{\text{Net income}}{\text{Equity}}$$

$$12\% = \frac{50\$}{\text{Equity}}$$

$$\text{Equity} = \frac{50\$}{12}$$
$$\text{Equity} = 4.16\$$$

Long Term debt:

is Zero.

CSS - 2006

Data Given:-

Credit Sale = 1.6 \$

Gross profit Margin = 20%

Days = 40

Inventory Turnover = 8

Year Days = 360

a) Accounts Receivable:-

$$AR \text{ in days} = \frac{360}{(\cancel{AR/sales})(sales/AR)}$$

$$40 = 360 (AR/sales)$$

$$40 = 360 (AR/16000000)$$

$$\frac{40 \times 16000000}{360} = AR$$

$$AR = 177,777.6$$

b) Amount in Inventory

$$\text{Inventory Turnover} = \frac{\text{CGS}}{\text{Inventory}}$$

$$\text{GP MR} = \frac{\text{GP}}{\text{Sales}}$$

$$20\% = \frac{\text{GP}}{16000000}$$

$$\text{GP} = \$3200000$$

$$\text{Sales} - \text{CGS} = \text{GP}$$

$$\$16000000 - \text{CGS} = \$3200000$$

$$\text{CGS} = \$12800000$$

Now

$$\frac{\text{CGS}}{\text{Inventory}} = \text{Inventory Turnover}$$

$$\text{Inventory} = \frac{\text{CGS}}{\text{I. Turnover}}$$

$$\text{Inventory} = \frac{12800000}{8}$$

$$\text{Inventory} = \$1600000$$

CSS 2003

Payment of C.L

The C.R will decrease. $\text{C.R} \propto \frac{1}{\text{C.L}}$

Purchase of fixed Assets

No effect on Current Ratio

iii) Cash collected from Customers

no effect on current Ratio.

Issue of new shares

have no effect on current Ratio

Part 2

Given data

Total Assets = RS 500,000

Equity = 200,000.

debt to total Asset Ratio = ?

~~Accounting equation Total Liabilities + Total~~

Accounting Equation ~~Equity~~

Total Assets = total Li + Total Equity

500000 = Total Liabilities + 200,000

3lac = Total Liabilities

Now

debt to total assets Ratio = $\frac{\text{Total debt}}{\text{Total assets}} \times 100$

= $\frac{300,000}{500,000} \times 100$

= 60%

2005 - CSS

Item	2000	2001	2002	2003
A C.A	RS 20,000	RS 22,400	RS 25,600	RS 28,100
B Inventories	RS 8,200	RS 10,000	RS 12,500	RS 14,000
C Current L	RS 10,000	RS 10,200	RS 10,700	RS 11,000

2. CURRENT RATIOS

● FORMULA

$$\text{CURRENT RATIO} = \frac{\text{CURRENT ASSETS}}{\text{CURRENT LIABILITIES}}$$

(i) = 2000

$$CR = \frac{20,000}{10,000}$$

$$CR = 2$$

(ii) = 2001

$$CR = \frac{22,400}{10,200} = 2.19$$

(iii) = 2002

$$CR = \frac{25,600}{10,700} = 2.39$$

(iv) = 2003

$$CR = \frac{28,100}{11,000}$$

$$CR = 2.55$$

Quick Ratios $\left(\frac{CA - \text{Inventory}}{CL} \right)$

2000

$$\begin{aligned} QR &= \frac{20,000 - 8200}{10,000} \\ &= \frac{11,800}{10,000} \Rightarrow 1.18 \end{aligned}$$

2001

$$\begin{aligned} QR &= \frac{22,400 - 10,000}{10,200} \\ &= \frac{12,400}{10,200} = 1.21 \end{aligned}$$

2002

$$\begin{aligned} Q.R &= \frac{25600 - 12,500}{10,700} \\ &= \frac{13100}{10,700} \Rightarrow 1.22 \end{aligned}$$

2003

$$\begin{aligned} Q.R &= \frac{28100 - 14000}{11000} \\ &= \frac{14100}{11000} \Rightarrow 1.28 \end{aligned}$$

(b)

Liquidity Position

= 800,000

CSS-2015

ASSETS

Cash	30,000
Acc. Receivable	200,000
Inventory	400,000
Fixed Assets	800,000

TOTAL ASSETS = 1,430,000

$$\text{Sales} = 40,00,000/-$$

$$\text{CGS} = 3,200,000/-$$

$$\text{Net profit} = 300,000/-$$

LIABILITIES

AP	230,000
Accruals	200,000
Bank loan	100,000
long T. debt	300,000
Common stock	100,000
Retained earning	<u>500,000</u>

TOTAL Li. = 1,430,000
and Stockholders

Solution:-

$$\text{Current Ratio} = \frac{\text{current Assets}}{\text{current liabilities}}$$

$$= \frac{30,000 + 200,000 + 400,000}{230,000 + 200,000}$$

$$= \frac{630,000}{430,000} = 1.46$$

Acid test Ratio or Quick Ratio

$$\text{Quick Ratio} = \frac{\text{CA} - \text{Inventory}}{\text{CL}}$$

$$= \frac{630,000 - 400,000}{430,000}$$

$$= 399,998.54$$

AVERAGE COLLECTION PERIOD:-

$$= \frac{\text{Accounts Receivable} \times 365 \text{ Days}}{\text{Net Credit Sales}}$$

$$= \frac{200,000 \times 365}{4,000,000}$$

$$= 0.05 \times 365 = 18.25$$

Inventory Turnover:-

$$\text{Inventory Turnover} = \frac{\text{CGS}}{\text{Inventory}}$$

$$= \frac{3,200,000}{400,000}$$

$$= 8$$

TOTAL DEBT/EQUITY :-

$$= \frac{\text{Total Debt}}{\text{Total Equity}}$$

$$= \frac{230,000 + 200,000 + 100,000 + 300,000}{100,000 + 500,000}$$

$$= \frac{830,000}{600,000} = 1.38$$

GROSS PROFIT MARGINE/LONG TERM DEBT

$$\frac{\text{Gross Profit}}{\text{Sales}} \times 100 = \text{GPMR}$$

Now

$$\text{Gross Profit} = \text{Sales} - \text{CGS}$$

$$= 4,000,000 - 3,200,000$$

$$= 800,000$$

$$GP = 800,000$$

Now

$$GPMR = \frac{800,000}{4,000,000} \times 100$$

$$= 0.2 \times 100 = 20$$

Net Profit Margin:-

$$NPMR = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

$$= \frac{300,000}{4,000,000} \times 100$$

$$= 0.075 \times 100$$

$$= 7.5$$

Total Assets Turnover

$$= \frac{\text{Net Sales}}{\text{Total Assets}}$$

$$= \frac{4,000,000}{1,430,000}$$

$$\text{Total Assets Turnover} = 2.79$$

Return on Assets

$$= \frac{\text{Net Income/Profit}}{\text{Total Assets}}$$

$$= \frac{300,000}{1,430,000}$$

$$= 0.209$$

CSS - 2007

Given:-

$$\text{Current Ratio} = 2.5$$

$$\text{Liquid Ratio} = 1.5$$

$$\text{Proprietary Ratio} = 0.75 \text{ (E / Fixed Assets)}$$

$$\text{Working capital} = \text{RS } 150,000$$

$$\text{Reserves and Surplus} = \text{RS } 1,00,000$$

$$\text{Bank overdraft (CL)} = \text{RS } 25,000$$

Solution:-

Current Assets: ?

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

$$2.5 = \frac{\text{Current Assets}}{25,000}$$

$$2.5 \times 25,000 = \text{Current Assets}$$

$$62,500 = \text{C.A}$$

CURRENT LIABILITIES

CSS-2012

Given:-

Current Ratio	2.0
Quick Ratio	1.4
Current Liabilities	100,000
Inventory turnover	6x
Gross Profit Margin	0.20

Calculate firm's sale

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$2.0 = \frac{\text{Current Assets}}{100,000}$$

$$(2.0 \times 100,000) = \text{Current Assets}$$

$$200,000 = \text{CA}$$

Now By using Quick ratios formula
for to find Inventory.

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

$$1.4 = \frac{200,000 - \text{Inv}}{100,000}$$

$$(1.4)(100,000) = 200,000 - \text{Inv}$$

$$140,000 - 200,000 = \text{Inventory}$$

$$60,000 = \text{Inventory}$$

Now

$$\text{Inventory turnover} = \frac{\text{CGS}}{\text{Inventory}}$$

$$\text{Inventory} \times 6x = \text{CGS}$$

$$60,000 \times 6x = \text{CGS}$$

$$\text{CGS} = 360,000$$

$$\text{GPMR} = \frac{\text{GP}}{\text{Sales}} \times 100$$

$$= \left(\frac{\text{Sales} - \text{CGS}}{\text{Sales}} \right) \times 100$$

$$0.20 =$$

Part (b)

Inventory Turnover

$$= \frac{CGS}{\text{Avg Inventory}}$$
$$= \frac{540,000}{135,000}$$
$$= 4$$

Accounts Receivable Turnover

$$= \frac{\text{Credit Sale}}{\text{avg. accounts Receivable}}$$
$$= \frac{1825000}{\left(\frac{380000 + 350000}{2}\right)}$$
$$= \frac{1825000}{365000} = 5$$

Gross profit Margin

$$= \frac{GP}{\text{Sales}} \times 100$$
$$= \frac{\text{Sales} - CGS}{\text{Sales}} \times 100$$
$$= \frac{1825000 - 540,000}{1825000} \times 100$$
$$= 0.70 \times 100 \Rightarrow 70\%$$

Current ratio

$$= \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{142000}{200,000}$$

$$= 0.71$$

Quick Ratio

$$= \frac{CA - \text{Inventory}}{CL}$$

$$= \frac{142000 - 150,000}{200,000}$$

$$= 0.04$$

Net Working Capital

$$= CA - CL$$

$$= 142000 - 200,000$$

$$= 58,000$$

$$NPMR = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

Sales - CGS = Gross Profit

⇒ Gross Profit - operating exp = OP Profit

18,25,000	Sales
- 540,000	CGS
<hr/>	
1285000	GP
- 600,000	OP exp
<hr/>	
685000	operating profit

∞

Net profit and PBIT because
There is no tax given

CSS-2019 (A & A)

Accounts Receivable

$$\text{A/R in Days} = \frac{360}{\text{Sales/AR}}$$

$$40 = \frac{360 \times \text{AR}}{\text{Sales}}$$

$$40 \times 1,800,000 = 360 \times \text{AR}$$

$$\frac{720,000,000}{360} = \text{AR}$$

$$\text{AR} = 2,000,000$$

Inventory

$$\text{Inventory turnover} = \frac{\text{Sales}}{\text{Inventory}}$$

$$6 = \frac{1,800,000}{\text{Inventory}}$$

$$\text{Inventory} = \frac{1,800,000}{6} = 300,000$$

Net Fixed Assets

$$\text{Total Assets turnover} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

$$\text{Total Assets} = \frac{\text{Net Sales}}{\text{Total Assets turnover}}$$

$$= \frac{1,800,000}{1.20}$$

$$= 1,500,000$$

Now

$$\begin{aligned}\text{Current Assets} &= \text{Cash} + \text{Inventory} + \text{Accounts RA} \\ &= 30,000 + 300,000 + 200,000 \\ &= 530,000\end{aligned}$$

$$\begin{aligned}\text{Net fixed Assets} &= \text{Total Assets} - \text{CA} \\ &= 1,500,000 - 530,000\end{aligned}$$

$$\text{Net fixed Assets} = 970,000$$

Notes Payable

$$\begin{aligned}\text{Current Liabilities} &= \text{Acc. payable} + \text{notes payable} \\ &\quad + \text{Accruals}\end{aligned}$$

$$= 120,000 + \text{Notes payable} + 20,000$$

$$\text{Current Assets} = \text{Cash} + \text{Market SEC} + \text{Inv} + \text{AR}$$

$$= 30,000 + 25,000 + 200,000 + 225,000$$

$$= 480,000$$

Now

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

$$1.60 = \frac{480,000}{\text{N.P} + 120,000 + 20,000}$$

$$1.60 \times (\text{N.P} + 120,000 + 20,000) = 480,000$$

$$192,000 + \text{NP} = 288,000$$

$$\text{NP} = 288,000 / 1.60$$

$$\text{Notes Payable} = 180,000$$

Long-Term debt

$$\text{Total Assets} = \text{Liabilities} + \text{Equity}$$

$$\text{Total Assets} = \text{C.L} + \text{Non Current L} + \text{Equity}$$

$$1,500,000 = 320,000 + \text{Non C.L} + 600,000$$

$$1,500,000 - 920,000 = \text{Non C.L}$$

$$\text{Non C.L} = 580,000$$

$$\text{Long term Debt} = 580,000$$



2016 - CSS (A/GA)

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

$$= \frac{3,800}{1,680}$$

$$= 2.26$$

Quick Ratio

$$= \frac{\text{CA} - \text{Inv}}{\text{C.L}}$$

$$= \frac{3,800 - 2,100}{1,680}$$

$$= \frac{1,700}{1,680}$$

$$= 1.01$$

Average collection period,

$$= \frac{\text{Accounts Receivable}}{\text{Net credit sale}} \times 365$$

$$= \frac{1,300}{12,680} \times 365$$

$$= 0.10 \times 365$$

$$= 37.42$$

Inventory Turnover Ratio

$$= \frac{\text{CGS}}{\text{Inventory}}$$

$$= \frac{\text{CGS} - \text{Depreciation}}{\text{Inventory}}$$

$$= \frac{8930 - 480}{2,100}$$

$$= \frac{8450}{2,100} = 4.02$$

Debt to net worth ratio-

$$= \frac{\text{Total debt}}{\text{Total Equity}}$$

$$= \frac{3680}{3440}$$

$$= 1.06$$

GPMR

$$\begin{aligned} &= \frac{\text{GP}}{\text{Sales}} \times 100 \\ &= \frac{3270}{12,680} \times 100 \\ &= 25.7 \end{aligned}$$

Net profit Margin

$$\begin{aligned} &= \frac{\text{Net income}}{\text{Sales}} \times 100 \\ &= \frac{670}{12,680} \times 100 \\ &= 5.28 \end{aligned}$$

Rate of Return on common Stock Equity

$$\begin{aligned} \text{Return on Equity} &= \frac{\text{Net Profit}}{\text{Equity}} \\ &= \frac{670}{12,680} \\ &= 0.052 \end{aligned}$$

CSS-2014

$$\begin{aligned} \text{Current Ratio} &= \frac{\text{C.A}}{\text{C.L}} \\ &= \frac{140,000}{60,000} \\ &= 2.33 \end{aligned}$$

$$\text{Quick Ratio} = \frac{\text{CA} - \text{Inv}}{\text{C-L}}$$
$$= \frac{140000 - 60000}{60,000}$$

debt Equity Ratio:

$$= \frac{\text{Total debt}}{\text{Total equity}}$$
$$= \frac{140000}{20,000}$$

Gross profit Ratio

$$\text{GPMR} = \frac{\text{GP}}{\text{Sales}} \times 100$$

$$\text{GP} = \text{Sales} - \text{CGS}$$

$$\text{GP} = 600,000 - 516,000 = 84,000$$

$$= \frac{84,000}{600,000} \times 100$$

$$= 0.14 \times 100$$

$$= 14$$

Operating ratio

$$\text{Operating ratio} = \frac{\text{Operating profit}}{\text{Sales}} \times 100$$

Now

$$\text{Operating profit} = \text{GP} - \text{operating exp}$$

$$\text{OP} = \frac{84000}{60000} \times 100$$

$$= 0.14 \times 100$$

$$= 14$$

CSS - 2016 (B. ad)

Accounts Receivable

$$\text{AR Days} = \frac{365}{(\text{Sales/AR})}$$

$$40.55 = \frac{365 \times \text{AR}}{1000}$$

$$\frac{40.55 \times 1000}{365} = \text{AR}$$

$$\text{AR} =$$

Current Assets

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

$$3.00 = \frac{\text{Current Assets}}{105.00}$$

$$3 \times 105 = \text{CA}$$

$$\boxed{\text{CA} = 315}$$

Total Assets

$$\begin{aligned} \text{Total Assets} &= \text{CA} + \text{Fixed A} \\ &= 283.50 + 315 \end{aligned}$$

$$\text{Total Assets} = 598.5$$

Return on total Assets

$$= \frac{\text{Net Sales}}{\text{Total Assets}}$$

$$= \frac{1000}{598}$$

$$= 1.67$$

Common Stock Equity

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Equity}}$$

$$12\% = \frac{\$50}{\text{Equity}}$$

$$\text{Equity} = \frac{50}{0.12}$$

$$\boxed{\text{Equity} = 2416.6}$$

Quick Ratio

CSS - 2017

$$\text{Current Ratio} = \frac{CA}{CL}$$

$$= \frac{10,000 + 15,000 + 20,000 + 455,000}{12,000}$$

$$= 41$$

Quick Ratio

$$= \frac{CA - \text{Inventory}}{CL}$$

$$= \frac{500,000 - 20,000}{12,000}$$

$$= \frac{480,000}{12,000}$$

$$= 40$$

Average collection period:-

$$\frac{\text{Accounts Receivable}}{\text{Net credit sales}} \times 365 \text{ Days}$$

$$= \frac{15,000}{500,000} \times 365$$

$$= 0.03 \times 365$$

$$= 10.95$$

Time interest earned

$$= \frac{\text{operating Income}}{\text{Interest expense}}$$

Now

$$\begin{aligned} \text{operating Income} &= \text{Sales} - \text{CGS} - \text{operating exp} \\ &= 500,000 - 300,000 - 60,000 \\ &= 140,000 \end{aligned}$$

Now

$$= \frac{\text{operating Income}}{\text{Interest exp}}$$

$$= \frac{140,000}{10,000}$$

$$= 14$$

Inventory Turnover

$$= \frac{\text{CGS}}{\text{Inventory}}$$

$$= \frac{300,000}{20,000} = 15$$

CSS-2018.

Accounts Receivable = ?

$$\text{AR Days} = \frac{365}{(\text{sales} / \text{AR})}$$

$$40 = \frac{365 \times \text{AR}}{1,800,000}$$

$$\frac{40 \times 1,800,000}{365} = \text{AR}$$

$$197,260.27 = \text{AR}$$

Inventory?

$$\text{Inventory turnover} = \frac{\text{Sales}}{\text{Inventory}}$$

$$\text{In} \times 6.0 = \text{Sales}$$

$$\text{Inventory} = \frac{1,800,000}{6}$$

$$\text{Inventory} = 300,000$$

Total current Assets

$$= \text{cash} + \text{Marketable Sec} + \text{A/R} + \text{Inventory}$$

$$= 32,720 + 25,000 + 300,000$$

$$+ 197,260.27$$

$$= 554,980.27$$

Total Assets

$$\text{Total Assets turnover} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

$$\text{Total Assets} = \frac{\text{Net Sales}}{\text{Total Asset Turnover}}$$

$$= \frac{1,800,000}{1.6}$$

$$= 1,125,000$$

Net fixed Assets

$$= \text{Total Assets} - \text{Current Assets}$$

$$= 1,125,000 + 554,980.27$$

$$= 1,679,980.27$$

Notes Payable

Current Assets Ratio = $\frac{\text{Current Assets}}{\text{Notes Payable + Acc Payable + Accruals}}$

$$= \frac{\text{Cash} + \text{Notes Payable} + \text{Acc Payable} + \text{Accruals}}{\text{Notes Payable} + 120,000 + 20,000}$$

$$1.60 = \frac{1,125,000}{\text{Notes payable} + 120,000 + 20,000}$$

$$1.60 (\text{Notes payable} + 140,000) = 1,125,000$$

$$1.60 * \text{N. payable} = 1,125,000 - 224,000$$

$$1.6 * \text{N. payable} = 901,000$$

$$\text{Notes payable} = \frac{901,000}{1.6}$$

$$= 563,125$$

Current Liab

Accounts payable

20,000 + 20,000

703,125

Stockholders

+ Equity

+ Equity

C.L + 600,000

Total current liabilities

$$= \text{Accounts payable} + \text{Notes payable} + \text{Accruals}$$

$$= 120,000 + 20,000 + 563,125$$

$$= 703,125$$

Total Liab and Stockholder Equity

long-term Debt

$$\text{Total Assets} = \text{Liabilities} + \text{Equity}$$

$$\text{Total Assets} = \text{C.L} + \text{Non C.L} + \text{Equity}$$

$$1,125,000 = 703,125 + \text{Non C.L} + 600,000$$

$$\text{Non C.L} = 178,125$$