The following is information concerning ABC Company and XYZ Company.

	ABC Company	XYZ Company
CURRENT ASSETS:		
Cash	26,500	48,900
Accounts and Notes Receivable	62,500	97,500
Merchandise Inventory	95,000	105,000
Prepaid Expenses	8,500	12,000
CAPITAL ASSETS:		
Pledged Plant & Equipment (Net)	205,700	231,600
	398,200	495,000
CURRENT LIABILITIES:		
Accounts Payable	65,500	62,000
Short Term Notes	30,000	40,000
LONG TERM LIABILITIES:		
Long Term Notes (Secured)	85,000	92,000
EQUITY:		
Common Shares	125,000	155,500
Retained Earnings	92,700	145,500
	398,200	495,000

Number of Common Shares	12,500	14,000

Data from Current Year Income Statement:

Sales	505,500	705,100
Cost of Goods Sold	310,500	475,000
Interest Expense	9,500	11,200
Income Tax Expense	7,500	9,300
Net Income	56,000	64,000

Beginning of Year and Other Data:

Accounts Receivable	72,500	75,500
Merchandise Inventory	102,500	98,000
Total Assets	325,500	395,000
Common Shares	105,000	125,000
Retained Earnings	52,000	98,000
Market Value per Share	29	35
Dividend per Share	1.20	1.80

Calculate the following ratios and underline the company's ratio that you believe is the best:

Working Paper:

Current Ratio = Current Assets / Current Liabilities
ABC Company =
XYZ Company =

Quick Ratio = Quick Assets / Current Liabilities
ABC Company =
XYZ Company =

Accounts Receivable Turnover = Sales / Average Receivables
ABC Company =
XYZ Company =

Merchandise Inventory Turnover = Cost of Goods / Average Inventory
ABC Company =
XYZ Company =

Days Sales Uncollected = Accounts Receivable / Sales X 365
ABC Company =
XYZ Company =

Days Stock in Inventory = Inventory / Cost of Goods X 365
ABC Company =
XYZ Company =

Debt Ratio = Total Liabilities / Total Assets X 100
ABC Company =
XYZ Company =

Equity Ratio = Total Equity / Total Assets X 100
ABC Company =
XYZ Company =

Pledged Assets to Secured Liabilities = Pledged Assets / Secured Liabilities
ABC Company =
XYZ Company =

Times Interest Earned = (Net Income + Income Tax + Interest Expense) / Interest Expense
ABC Company =
XYZ Company =

Gross Margin = (Sales – Cost of Goods) / Sales X 100
ABC Company =
XYZ Company =

Profit Margin = Net Income / Sales X 100
ABC Company =
XYZ Company =

Total Asset Turnover = Sales / Average Total Assets
ABC Company =
XYZ Company =

Return on Total Assets = Net Income / Average Total Assets X 100
ABC Company =
XYZ Company =

Return on Equity = Net Income / Average Shareholders Equity X 100
ABC Company =
XYZ Company =

Book Value per Share = Common Share Dollars / Number of Common Shares
ABC Company =
XYZ Company =

Earnings per Share = Net Income / Number of Shares
ABC Company =
XYZ Company =

Price Earnings Ratio = Market Value per Share / Earnings per Share
ABC Company =
XYZ Company =

Dividend Yield = Dividend per Share / Market Value per Share X 100
ABC Company =
XYZ Company =

Answer:

Current Ratio = Current Assets / Current Liabilities
ABC Company = (26,500 + 62,500 + 95,000 + 8,500) / (65,500 + 30,000) = **2.02 : 1**
XYZ Company = (48,900 + 97,500 + 105,000 + 12,000) / (62,000 + 40,000) = **<u>2.58 : 1</u>**

Quick Ratio = Quick Assets / Current Liabilities
ABC Company = (26,500 + 62,500) / (65,500 + 30,000) = **0.93 : 1**
XYZ Company = (48,900 + 97,500) / (62,000 + 40,000) = **<u>1.44 : 1</u>**

Accounts Receivable Turnover = Sales / Average Receivables
ABC Company = 505,500 / [(62,500 + 72,500) / 2] = **7.49 Times**
XYZ Company = 705,100 / [(97,500 + 75,500) / 2] = **<u>8.15 Times</u>**

Merchandise Inventory Turnover = Cost of Goods / Average Inventory
ABC Company = 310,500 / [(95,000 + 102,500) / 2] = **3.14 Times**
XYZ Company = 475,000 / [(105,000 + 98,000) / 2] = **<u>4.68 Times</u>**

Days Sales Uncollected = Accounts Receivable / Sales X 365
ABC Company = 62,500 / 505,500 X 365 = **<u>45.13 Days</u>**
XYZ Company = 97,500 / 705,100 X 365 = **50.47 Days**

Days Stock in Inventory = Inventory / Cost of Goods X 365
ABC Company = 95,000 / 310,500 X 365 = **111.67 Days**
XYZ Company = 105,000 / 475,000 X 365 = **<u>80.68 Days</u>**

Debt Ratio = Total Liabilities / Total Assets X 100
ABC Company = (65,500 + 30,000 + 85,000) / 398,200 X 100 = **45.33%**
XYZ Company = (62,000 + 40,000 + 92,000) / 495,000 X 100 = **<u>39.19%</u>**

Equity Ratio = Total Equity / Total Assets X 100
ABC Company = (125,000 + 92,700) / 398,200 X 100 = **54.67%**
XYZ Company = (155,500 + 145,500) / 495,000 X 100 = **<u>60.81%</u>**

Pledged Assets to Secured Liabilities = Pledged Assets / Secured Liabilities
ABC Company = 205,700 / 85,000 = **2.42 : 1**
XYZ Company = 231,600 / 92,000 = **<u>2.52 : 1</u>**

Times Interest Earned = (Net Income + Income Tax + Interest Expense) / Interest Expense
ABC Company = (56,000 + 7,500 + 9,500) / 9,500 = **<u>7.68 Times</u>**
XYZ Company = (64,000 + 9,300 + 11,200) / 11,200 = **7.54 Times**

Gross Margin = (Sales – Cost of Goods) / Sales X 100
ABC Company = (505,500 – 310,500) / 505,500 X 100 = **<u>38.58%</u>**
XYZ Company = (705,100 – 475,000) / 705,100 X 100 = **32.63%**

Profit Margin = Net Income / Sales X 100
ABC Company = 56,000 / 505,500 X 100 = **11.08%**
XYZ Company = 64,000 / 705,100 X 100 = **9.08%**

Total Asset Turnover = Sales / Average Total Assets
ABC Company = 505,500 / [(398,200 + 325,500) / 2] = **1.40 Times**
XYZ Company = 705,100 / [(495,000 + 395,000) / 2] = **1.58 Times**

Return on Total Assets = Net Income / Average Total Assets X 100
ABC Company = 56,000 / [(398,200 + 325,500) / 2] X 100 = **15.48%**
XYZ Company = 64,000 / [(495,000 + 395,000) / 2] X 100 = **14.38%**

Return on Equity = Net Income / Average Shareholders Equity X 100
ABC Company = 56,000 / {[(125,000 + 92,700) + (105,000 + 52,000)] / 2} X 100 = **29.89%**
XYZ Company = 64,000 / {[(155,500 + 145,500) + (125,000 + 98,000)] / 2} X 100 = **24.43%**

Book Value per Share = Common Share Dollars / Number of Common Shares
ABC Company = 125,000 / 12,500 = $10.00 (Neither one is
XYZ Company = 155,500 / 14,000 = $11.11 Good or Bad.)

Earnings per Share = Net Income / Number of Shares
ABC Company = 56,000 / 12,500 = **$4.48**
XYZ Company = 64,000 / 14,000 = **$4.57**

Price Earnings Ratio = Market Value per Share / Earnings per Share
ABC Company = 29 / 4.48 = **6.47 : 1**
XYZ Company = 35 / 4.57 = **7.66 : 1**

Dividend Yield = Dividend per Share / Market Value per Share X 100
ABC Company = 1.20 / 29 X 100 = **4.14%**
XYZ Company = 1.80 / 35 X 100 = **5.14%**