The following is information concerning ABC Company and XYZ Company.

	ABC Company	XYZ Company
CURRENT ASSETS:		
Cash	22,600	42,800
Accounts and Notes Receivable	92,500	101,100
Merchandise Inventory	88,800	120,000
Prepaid Expenses	11,800	13,400
CAPITAL ASSETS:		
Pledged Plant & Equipment (Net)	178,500	255,000
	394,200	532,300
CURRENT LIABILITIES:		
Accounts Payable	65,000	82,300
Short Term Notes	20,000	24,000
LONG TERM LIABILITIES:		
Long Term Notes (Secured)	90,000	101,000
EQUITY:		
Common Shares	136,500	159,000
Retained Earnings	82,700	166,000
	394,200	532,300

Number of Common Shares	13,575	15,775

Data from Current Year Income Statement:

Sales	527,508	744,000
Cost of Goods Sold	388,500	529,000
Interest Expense	10,600	13,200
Income Tax Expense	8,600	15,100
Net Income	48,800	67,200

Beginning of Year and Other Data:

Accounts Receivable	73,500	75,300
Merchandise Inventory	106,300	84,500
Total Assets	385,700	450,000
Common Shares	136,500	159,000
Retained Earnings	47,550	114,700
Market Value per Share	29	35
Dividend per Share	1.00	1.00

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 = (22,600 + 92,500 + 88,800 + 11,800) / (65,000 + 20,000) = **2.54: 1**
XYZ Company = (42,800 + 101,100 + 120,000 + 13,400) / (82,300 + 24,000) = **2.61 : 1**

Quick Ratio = Quick Assets / Current Liabilities

ABC Company = (22,600 + 92,500) / (65,000 + 20,000) = **1.35 : 1**
XYZ Company = (42,800 + 101,100) / (82,300 + 24,000) = **1.35 : 1**

Accounts Receivable Turnover = Sales / Average Receivables

ABC Company = 527,508 / [(73,500 + 92,500) / 2] = **6.36 Times**
XYZ Company = 744,000 / [(75,300 + 101,100) / 2] = **8.44 Times**

Merchandise Inventory Turnover = Cost of Goods / Average Inventory

ABC Company = 388,500 / [(106,300 + 88,800) / 2] = **3.98 Times**
XYZ Company = 529,000 / [(84,500 + 120,000) / 2] = **5.17 Times**

Days Sales Uncollected = Accounts Receivable / Sales X 365

ABC Company = 92,500 / 527,508 X 365 = **64.00 Days**
XYZ Company = 101,100 / 744,000 X 365 = **49.60 Days**

Days Stock in Inventory = Inventory / Cost of Goods X 365

ABC Company = 88,800 / 388,500 X 365 = **83.43 Days**
XYZ Company = 120,000 / 529,000 X 365 = **82.80 Days**

Debt Ratio = Total Liabilities / Total Assets X 100

ABC Company = (65,000 + 20,000 + 90,000) / 394,200 X 100 = **44.39%**
XYZ Company = (82,300 + 24,000 + 101,000) / 532,300 X 100 = **38.94%**

Equity Ratio = Total Equity / Total Assets X 100

ABC Company = (136,500 + 82,700) / 394,200 X 100 = **55.61%**
XYZ Company = (159,000 + 166,000) / 532,300 X 100 = **61.06%**

Pledged Assets to Secured Liabilities = Pledged Assets / Secured Liabilities

ABC Company = 178,500 / 90,000 = **1.98 : 1**
XYZ Company = 255,000 / 101,000 = **2.52 : 1**

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

ABC Company = (48,800 + 8,600 + 10,600) / 10,600 = **6.42 Times**
XYZ Company = (67,200 + 15,100 + 13,200) / 13,200 = **7.23 Times**

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

ABC Company = (527,508 – 388,500) / 527,508 X 100 = **26.35%**
XYZ Company = (744,000 – 529,000) / 744,000 X 100 = **28.90%**

Profit Margin = Net Income / Sales X 100
ABC Company = 48,800 / 527,508 X 100 = **9.25%**
XYZ Company = 67,200 / 744,000 X 100 = **9.03%**

Total Asset Turnover = Sales / Average Total Assets
ABC Company = 527,508 / [(385,700 + 394,200) / 2] = **1.35Times**
XYZ Company = 744,000 / [(450,000 + 532,300) / 2] = **1.51 Times**

Return on Total Assets = Net Income / Average Total Assets X 100
ABC Company = 48,800 / [(385,700 + 394,200) / 2] X 100 = **12.51%**
XYZ Company = 67,200 / [(450,000 + 532,300) / 2] X 100 = **13.68%**

Return on Equity = Net Income / Average Shareholders Equity X 100
ABC Company = 48,800 / {[(136,500 + 47,550) + (136,500 + 82,700)] / 2} X 100 = **24.20%**
XYZ Company = 67,200 / {[(159,000 + 114,700) + (159,000 + 166,000)] / 2} X 100 = **22.45%**

Book Value per Share = Common Share Dollars / Number of Common Shares
ABC Company = 136,500 / 13,575 = $10.06 (Neither one is
XYZ Company = 159,000 / 15,775 = $10.08 Good or Bad.)

Earnings per Share = Net Income / Number of Shares
ABC Company = 48,800 / 13,575 = **$3.59**
XYZ Company = 67,200 / 15,775 = **$4.26**

Price Earnings Ratio = Market Value per Share / Earnings per Share
ABC Company = 29 / 3.59 = **8.08 : 1**
XYZ Company = 35 / 4.26 = **8.22 : 1**

Dividend Yield = Dividend per Share / Market Value per Share X 100
ABC Company = 1.00 / 29 X 100 = **3.45%**
XYZ Company = 1.00 / 35 X 100 = **2.86%**