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Managerial Finance Assignments

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3-1 The assets of Dallas & Associates consist entirely of current assets and net plant and equipment. The firm has total assets of \$2.5 million and net plant and equipment equals \$2 million. It has notes payable of \$150,000, long-term debt of \$750,000, and total common equity of \$1.5 million. The firm does have accounts payable and accruals on its balance sheet. The firm only finances with debt and common equity, so it has no preferred stock on its balance sheet.

From the data given in the problem, we know the following:

Current assets	\$ 500,000 ^b	Accounts payable and accruals	\$
100,000 ^d			
Net plant and equipment	2,000,000		
	Notes payable	<u>150,000</u>	
		Current liabilities	\$ 250,000
		Long-term debt	750,000
		Total common equity	<u>1,500,000</u>
Total assets	<u>\$2,500,000</u>		
	Total liabilities and equity	<u>\$2,500,000^a</u>	

a. What is the amount of total liabilities and equity that appears on the firm's balance sheet?

We are given that the firm's total assets equal \$2,500,000. Since both sides of the balance sheet must equal, total liabilities and equity must equal total assets = \$2,500,000

b. What is the balance of current assets on the firm's balance sheet?

$$\begin{aligned}\text{Total assets} &= \text{Current assets} + \text{Net plant and equipment} \\ \$2,500,000 &= \text{Current assets} + \$2,000,000 \\ \text{Current assets} &= \$2,500,000 - \$2,000,000 \\ \text{Current assets} &= \$500,000\end{aligned}$$

c. What is the balance of current liabilities on the firm's balance sheet?

$$\begin{aligned}\text{Total liabilities and equity} &= \text{Current liabilities} + \text{Long-term debt} + \\ \text{Total common equity} & \\ \$2,500,000 &= \text{Current liabilities} + \$750,000 + \$1,500,000 \\ \$2,500,000 &= \text{Current liabilities} + \$2,250,000 \\ \text{Current liabilities} &= \$2,500,000 - \$2,250,000 \\ \text{Current liabilities} &= \$250,000\end{aligned}$$

d. What is the amount of accounts payable and accruals on its balance sheet? [Hint:

Consider this as a single line item on the firm's balance sheet.]

$$\begin{aligned}\text{Current liabilities} &= \text{Accounts payable and accruals} + \text{Notes payable} \\ \$250,000 &= \text{Accounts payable and accruals} + \$150,000 \\ \text{Accounts payable and accruals} &= \$250,000 - \$150,000 \\ \text{Accounts payable and accruals} &= \$100,000\end{aligned}$$

e. What is the firm's net working capital?

$$\begin{aligned}\text{Net working capital} &= \text{Current assets} - \text{Current liabilities} \\ \text{Net working capital} &= \$500,000 - \$250,000 \\ \text{Net working capital} &= \$250,000\end{aligned}$$

f. What is the firm's net operating working capital?

$$\begin{aligned}\text{Net operating working capital} &= \text{Current assets} - (\text{Current liabilities} - \\ &\text{Notes payable}) \\ \text{Net operating working capital} &= \$500,000 - (\$250,000 - \$150,000) \\ \text{Net operating working capital} &= \$400,000\end{aligned}$$

g. What is the explanation for the difference in your answers to parts e and f?

$$\begin{aligned} \text{NOWC} - \text{NWC} &= \$400,000 - \$250,000 \\ \text{NOWC} - \text{NWC} &= \$150,000. \end{aligned}$$

The difference between the two is equal to the notes payable balance

3-2 Little Books Inc. recently reported \$3 million of net income. Its EBIT was \$6 million, and its tax rate was 40%. What was its interest expense? [Hint:

Write out the headings for an income statement and fill in the known values.

Then

divide \$3 million of net income by $(1 - T) = 0.6$ to find the pretax income.

The difference

between EBIT and taxable income must be interest expense. Use this same procedure to

complete similar problems.]

NI = \$3,000,000; EBIT = \$6,000,000; T = 40%; Interest = ?
Need to set up an income statement and work from the bottom up.

EBIT	\$6,000,000	
Interest	<u>1,000,000</u>	
EBT	\$5,000,000	$\text{EBT} = \frac{\$3,000,000}{(1 - T)} = \frac{\$3,000,000}{0.6}$
Taxes (40%)	<u>2,000,000</u>	
NI	<u>\$3,000,000</u>	

$$\text{Interest} = \text{EBIT} - \text{EBT} = \$6,000,000 - \$5,000,000 = \$1,000,000$$

3-3 Pearson Brothers recently reported an EBITDA of \$7.5 million and net