

TE 566 Finance for Engineering Management

Homework 1

Submitted By,
Dev Vipulkumar Patel
NetID: dvp4

Balance Sheet Week 1

BALANCE SHEET		XXX COMPANY	YEAR END DATE
CURRENT ASSETS		CURRENT LIABILITIES	
Cash	\$ 65,000	Accounts payable	\$ 25,000
Accounts receivable	\$ 10,000		
Inventory	\$ 30,000	Total Current Liabilities	\$ 25,000
Total Current Assets	\$ 105,000		
FIXED ASSETS		LONG TERM DEBT	
Building	\$ 100,000	Mortgage	\$ 75,000
Total Fixed Assets	\$ 100,000	Total Long Term Debt	\$ 75,000
		Net Worth Beginning	\$ 100,000
		Gross Profit*	\$ 5,000
		Net Worth Ending	\$ 105,000
		Total Liabilities	
Total Assets	\$ 205,000	& Net Worth	\$ 205,000

(*profit from example sale)

Week 2 Assumptions:

- Inventory (\$15,000) sold.
- Gross margin = 40% , Cost = \$15,000
Selling price = \$25,000
- Cash → 60% → \$15,000.
- Credit → 40% → \$10,000
- Inventory purchases (Payables) are paid this week (\$25,000)

BALANCE SHEET

WEEK 2

CURRENT ASSETS

Cash \$52,000

Accounts Receivable \$20,000

Inventory \$15,000

Total current assets \$87,000

FIXED ASSETS

Building \$100,000

Total fixed assets \$100,000

CURRENT LIABILITIES

Total \$0

LONG TERM DEBTS

Mortgage \$75,000

Total L.T. Debts \$75,000

$$\begin{aligned}\text{Net Worth (at Week 1 end)} &= \$105,000 - \$3,000 \\ &= \$102,000.\end{aligned}$$

$$\begin{aligned}\text{Net Worth (at Week 2 end)} &= \text{Assets} - \text{Liabilities} \\ &= \$187,000 - \$75,000 \\ &= \$112,000.\end{aligned}$$

$$\text{Gross Profit} = \$10,000.$$

Week 3 Assumptions :

- Week 1 Account Receivables are recieved.
- Inventory is replenished - \$12,000
 - Cash \$6,000
 - Payables \$6,000
- wages paid at the end of week (\$2,000)

Balance Sheet

WEEK 3

CURRENT ASSETS

Cash	\$65,000
Acc. Receivable	\$18,000
Inventory	\$15,000

Total current assets \$98,000

FIXED ASSETS

Building	\$100,000
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Total fixed assets \$100,000

CURRENT LIABILITIES

Acc. Payable	\$6,000
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Total \$6,000

LONG TERM DEBTS

Mortgage	\$75,000
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Total L.T. Debts \$75,000

$$\text{Net Worth (Week 3 end)} = A - L$$

$$= \$198,000 - \$81,000$$

$$= \$117,000$$

$$\text{Gross Profit} = \$5,000$$

Week 4 Assumptions:

- Week 3 Payables are paid in the start of week 4.
- Account Receivables recieved — \$10,000 from week 2.
- Inventory replenished for cost \$12,000
 - Cash \$6,000
 - Credit \$6,000
- Wages paid at the end of week (\$2,000)

Balance Sheet

WEEK 4

CURRENT ASSETS

Cash \$72,000
Inventory \$15,000
Receivables \$16,000

Total current assets \$103,000

FIXED ASSETS

Building \$100,000

Total fixed assets \$100,000

CURRENT LIABILITIES

Acc. Payables \$6,000

Total \$6,000.

LONG TERM DEBTS

Mortgage \$75,000

Total L.T. Debts \$75,000

$$\begin{aligned}\text{Net worth (Week 4 end)} &= A - L \\ &= \$203,000 - \$81,000 \\ &= \$122,000\end{aligned}$$

Gross Profit = \$5,000.

Week 5 Assumptions:

- Week 4 Payables are paid from Cash account
- Inventory sold, then replenished \$17,000.

Cash	Credit
\$10,000	\$7,000

- Week 3 Receivables are received (\$8,000).

Balance Sheet

WEEK 5

CURRENT ASSETS

Cash \$73,000

Inventory \$20,000

Receivables \$16,000

Total current assets \$109,000

FIXED ASSETS

Building \$100,000

Total fixed assets \$100,000

CURRENT LIABILITIES

Acc. Payables \$7,000

Total \$7,000.

LONG TERM DEBTS

Mortgage \$75,000

Total L.T. Debts \$75,000

$$\text{Net Worth (Week 5 end)} = A - L$$

$$= \$209,000 - \$82,000$$

$$= \$127,000$$

$$\text{Gross Profit} = \$5000$$