

Financial Statements for Manufacturing Businesses

Importance of Financial Statements

Accounting plays a critical role in decision-making. Accounting provides the financial framework for analyzing the results of an executed set of decisions and makes possible the continuous success of a business or improvement in operations. Secondly, accounting provides much of the necessary information needed in making good decisions. Thirdly, the management accountant provides a knowledge of basic decision-making tools that helps find the best alternative in decision-making.

It is the accountant's knowledge about preparing financial statements and his or her abilities to analyze and interpret financial statements that makes the controllership function in a business so valuable to management. However, it is also important for management to have a fundamental knowledge of financial statements, particularly regarding the analysis and evaluation of financial statements to make decisions.

A primary objective of a business is to increase the assets from operations. By operations is meant all the revenue and expense transactions of a business for a defined period of time. Since the excess of revenue over expenses (net income) increases the equity of a business, it is often said that the primary objective is to increase stockholders' wealth, assuming the business is a corporation. The success of a business in financial terms, then, depends on how well management manages revenues and expenses. In other terms, the decisions that management makes concerning the operations of the business are of paramount importance. Management has the responsibility to make the kinds of decisions that generates net income.

Revenues are the inflow of assets caused by the operations of the business. The term revenue necessarily implies increases in assets. If a transaction does not cause an increase in an asset, then that transaction is not a revenue transaction. Following is a list of several types of items that fall under the category of revenue:

Asset Inflow
Cash or Accounts receivable
Cash or interest receivable
Cash or rent receivable

Expenses are the outflow of assets from the operations of the business. Expenses are caused by activities necessary to generate revenue. When revenues exceeds expenses as is the goal, the difference is called net income. If a transaction does not cause a decrease in an asset, then that transactions is not an expense. Following is a list of several expenses and the asset decrease associated with that particular expense.

Asset outflow
Prepaid insurance
Expired life of the service value
Supplies
Expired cost of a building

Technically, the asset outflow associated with salaries is not cash. Payments are made to workers and other employees because they create something of value. In more technical terms an expense is the expired value of an asset. A janitor is paid to clean floors. The thing of value acquired is a clean floor and as long as the floor remains clean, it is something of value. However, when the clean floor becomes dirty again, then the value of the clean floor asset has expired. Because many assets have a very short life, the accountant often simply records the expense even though the value of the assets at the time of recording has not yet expired.

Often the acquisition of an asset is not paid for immediately and the amount then owed is called a liability. Liabilities are debts or obligations to pay at some future date and are a common form of financing in a business. There are three primary sources of assets in a business: (1) revenues (2) liabilities (3) capital. The five key words from an accounting viewpoint and also from a management viewpoint are assets, liabilities, capital, revenue, and expenses.

In one sense, the purpose of management is to make asset, liabilities, capital, revenue, and expense decisions. Since the income statement shows revenues, expenses and net income and the balance sheet shows assets, liabilities, and capital, we can say that the purpose of management is to manage assets, liabilities, capital, revenue, and expenses. Stated simply, the purpose of management is to manage financial statements.

Because of the importance of sound operations and financial condition, it is critically important for both management and accountants to have a sold understanding of financial statements. While accountants prepare financial statements, it is management that creates financial statements through the decisions it makes. Because of the importance of financial statements, the rest of this chapter is concerned with presenting the fundamentals of financial statements for a manufacturing business.

The four financial statements of critical value in this text are as follows:

- 1. Balance sheet
- 2. Income statement
- 3. Cost of goods manufactured statement
- 4. Statement of cash flow

Financial statements are based on well defined accounting concepts and standards, some of which are fairly technical and require some concentrated study to learn and use. The following is a list of accounting terminology and concepts important in understanding financial statements for a manufacturing business.

Accounting Terminology			
Amortization	Depreciation	Material used	
Accounts receivable	Direct cost	Net income	
Accounts payable	Dividends	Net operating income	
Bonds	Finished goods	Net income after taxes	
Bad debts	Fixed assets	Perpetual inventory	
Credit	Factory labor	Periodic inventory	
Capital	Fixed cost	Retained earnings	
Cash	Gain/loss on sale	Premium/discount on stock	
Common stock	Gross profit	Premium/discount on bonds	
Contribution margin	Indirect cost	Stockholders' equity	
Cost	Inventory	Tax expense	
Current assets	Income taxes	Treasury stock	
Cost of goods sold	Investment	Trade-in value	
Cost of goods manufactured	Manufacturing overhead	Variable cost	

Hopefully, you have learned these terms in a previous accounting course and only some review of these terms is needed.

In addition to terminology, there are some accounting concepts and conventions of a broader nature that involve theory and even, in some cases, considerable differences of opinion. Some of the important concepts involved in this book are shown as follows.

	ing Concepts
Absorption costing	Earned/unearned revenue
Accrual basis accounting	Inventory costing methods
Accounting control	Matching
Cash basis accounting	Planning
Cost	Standards/principles of accounting
Control	Full costing reporting
Deferred charges	Contribution basis reporting
Direct costing	

Accounting Financial Statement Relationships

In addition to important financial statement terminology, there are a number of manufacturing financial statement relationships critical to understanding and using financial statements. These relationships may be summarized as simple mathematical equations. The most important of these relationships are the following:

Cost of Goods Manufactured Statement

- Material used = materials (beginning) + material purchases materials inventory (ending)
- Cost of goods manufactured = materials used + factory labor + manufacturing overhead + work in process (beginning) work in process (ending)

Income statement

- Cost of goods sold = finished goods (beginning) + cost of goods manufactured finished goods (ending)
- Finished goods (beginning) plus cost of goods manufactured is often called goods available for sale.
- Net income = sales cost of goods sold operating expenses
- The difference between sales and cost of goods sold is often reported as gross profit.

Balance Sheet

Assets = liabilities + stockholders' equity

Assets = current assets + fixed assets + other assets

Liabilities = current liabilities + long-term liabilities

Stockholders' equity = common stock + premium/discount on common stock + retained earnings

Statement of Cash Flow

Change in cash = sources and uses from operations + sources and uses from financing activities + sources and uses from investing activities.

While the above equations may seem a bit complex and imposing, these relationships still, nevertheless, form the foundation of financial statements for a manufacturing company. Since it is critical that managerial decision-makers understand and use financial statement information, it is essential that the serious student of management understand these basic financial statement relationships. A complete set of financial statements for the last period of operations may be found in chapter 9 of *The Management/Accounting Simulation*. However, often a summarized version is easier understand and use for some purposes. Therefore, a summarized version of the financial statements for the V. K. Gadget Company is now presented in Figure 3.1.

Analyzing Financial Statements

Understanding financial statements is only the first step in using them. The second step is to analyze them in order to discover any existing or potential problem areas of profit performance or financial conditions that needs corrective action. Several tools exist that may be used including the following:

- 1. Comparative statements
- 2. Financial statement ratios

Figure 3.1 • Financial Statements

Material Purchases4,892,160Cost of goods sold76,832,320Gross profit9	7,123,428 7,878,470
Material used4,767,206General and Admin.Factory labor2,787,840Fixed mfg. overhead1Manufacturing Overhead (V)323,424Total expenses11\$7,878,470Net operating income(2Units manufactured57,027Income taxes(2Cost per unit\$138.16	9,244,958 9,244,958 8,733,425 924,313 1,889,574 11,547,312 (2,302,354) 112,500 (965,941) \$1,448,912)

V. K. Gadget Comp Balance Sheet Dec. 31, year 1	any	V. K. Gadget Com Statement of Cash For the quarter Ended, De	Flow
Assets Current Assets Fixed assets Other assets	\$3,731,277 6,400,000 -0-	Cash flow from Operating Sources Uses	
Total Assets Liabilities Current liabilities Long-term Total liabilities	\$10,131,277 5,630,523 -0- \$5,630,523	Excess of uses over so Cash flow from Investing a Sources Uses	
Stockholders' Equity Common stock Premium on common stock Retained earning Total stockholders' equity Total liabilities and equity	\$6,000,000 1,000,000 (2,499,246) \$4,500,754 \$10,131,277	Cash flow from financing a Sources Uses Net decrease in cash	-0- activities -0- -0- \$ -0-

The use of ratios is a commonly used method to determine conditions that might be a current or future problem. The current ratio can be computed to determine if current assets are sufficient to make payments of current liabilities. The debt/equity ratio is a good indicator of whether the company is too heavily burdened with debt. The profit margin percentage is a good measure of the adequacy of net income to sales. The computation of the return on investment ratio is an excellent benchmark for determining whether net income is satisfactory or unsatisfactory. Numerous other ratios may be computed and most elementary accounting textbooks do an excellent job of discussing the more important ratios. A detailed discussion of ratios is presented in chapter 17.

Financial Statements: A Model of Decision-making

Also, financial statements may be used as a guide to identifying what financial statements elements are directly affected by a specific decision. This approach is not commonly used, but because it is helpful in understanding how decisions affect the various items of financial statements, it is discussed here now in some detail. For example, every item on the balance sheet such as accounts receivable or inventory is the result of the execution of one or more identifiable decision. It is management's primary responsibility to manage each element of a given financial statement. Financial statements, in one sense, are a check list of what management is to manage. This approach states rather explicitly, as previously discussed, that a primary purpose of management is to manage assets, liabilities, capital, revenue, and expenses.

To clarify the above statements, the following financial statements of the V. K. Gadget Company are presented in terms of decisions and required information.

Cost of Goods Manufactured Statement				
Cost Element	Decision(s)	Information Required		
Material	Supplier A, B, C, or D Order size, material X Number of orders, material X Order size, material Y Number of orders, material Y	List prices Quantity discounts Carrying cost Cost of placing an order		
Direct labor (variable)	Number of factory workers Wage rate Budgeted production	Units of equipment Wage rate function Production budget		
Manufacturing overhead	Type of finishing department equipment Order size of material Factory labor compensation	Capacity required Carrying cost of inventory Overhead rate Variable cost rates Salaries, supervisors		

Figure 3.2 •

These financial statement models presented in terms of decisions and required information rather than actual values clearly indicate an important point. It is management rather than accountants that actually creates financial statements. The financial well being of the company's operations is clearly the full responsibility of management.

Accounting Policies and Procedures

While the operating and financial success of a company falls squarely on the shoulders of management, there is still considerable latitude on the part of accountants in preparing financial statements. Any accounting system involves rules, standards, and procedures that can vary from company to company. The overall guiding principle

Income Statement				
Item	Decisions	Information Required		
Sales	Price Credit terms Advertising Commission rate No. of sales people Sales people salary	Demand schedule Sales-calls function Advertising rates Commission rate function Calls per quarter		
Cost of goods sold	Same as cost of goods manufactured (see above) Sales decisions (see above)	Same as cost of goods manufactured and sales decisions		
Expenses	· · · · · ·			
Advertising	Advertising budget	Advertising cost		
Sales people	Number of sales people	Demand curve		
compensation	Commission rate Sales people salaries	Sales people compensation function		
Credit expense	Credit terms	Credit terms function Credit department expenses		
Depreciation	Units of equipment and finishing	Operating costs		
	Department equipment replacement	Depreciation rates		
Bad debts	Credit terms	Credit terms function		
Interest expense	Bank loans Issue of bonds Line of credit	Interest rate Cost of capital Discount rate		

Figure 3.3 •

is that once rules, standards, and procedures have been adopted, they should be consistently applied. In the V. K. Gadget Company, the following procedures and methods have been adopted.

Accounting Policies and Procedures		
Item	Procedure	
Material costing method	Average costing	
Finished goods costing method	Average costing	
Bad debt method	Percentages of sales method	
Depreciation of equipment	Straight-line	
Income format	Segmental income statement	
Manufacturing overhead costing method	Direct costing (variable costing)	
Treatment of common expenses	Allocation by sales orders	
Income taxes	Net income is shown net of taxes	
Bond discount	Scientific amortization method	

Figure 3.4 •

Management Accounting Systems

In addition to understanding and utilizing financial statements and financial accounting tools, it is important that both accountants and management have a good understanding of management accounting concepts and tools. One of the most effective tools is comprehensive business budgeting. The objective of comprehensive budgeting is to prepare a set of financial statements in advance. The end result of the budgeting process is a planned set of financial statements. A comprehensive budgeting system for the V. K. Gadget company, the simulated company in *The Management/Accounting Simulation*, has been developed and is ready for use. Whether or not this system should be used is a decision that you would make, assuming you are a participant in the simulation, and serving in the role of new management. In addition to the comprehensive budget, other computerized management accounting tools are available for use. These tools include:

- 1. Business budgeting
- 2. Cost behavior
- 3. Cost-volume-profit analysis
- 4. Capital budgeting analysis
- 5. Credit analysis
- 6. Demand sensitivity analysis
- 7. Direct costing analysis (variable costing)

- 8. Incremental analysis
- 9. Inventory management analysis
- 10. Keep or replace analysis
- 11. Performance evaluation
- 13. Return on investment
- 14. Sales people compensation analysis
- 15. Segmental contribution reporting
- 16. Wage rate analysis

If your instructor has adopted this simulation in connection with this text book, then hopefully your participation in *The Management/Accounting Simulation* will give you an experience that will solidly persuade you that in any business the accounting department is a vital function in the process of decisions being made and executed. With a proper attitude on the part of accounting towards management and management towards accounting, the likelihood of better decisions and a more successful business is greatly increased.

Comparison of Merchandising and Manufacturing Businesses

In order to understand financial statements for a manufacturing business, as a student you first need a good understanding of financial statements for a merchandising business. In general, merchandising and manufacturing statements are the same, In fact, in terms of basic components they are identical.

Retail Business		Manufacturing Business	
Income Statement		Income Statement	
The five basic elements of the income statement for a retail business are:		The five basic elements of the statement for a manufacturing	
1. Sales	\$100,000	1. Sales	\$100,000
2. Cost of goods sold	60,000	2. Cost of goods sold	60,000
3. Gross profit	40,000	3. Gross profit	40,000
4. Expenses	10,000	4. Expenses	10,000
5. Net income	\$ 30,000	5. Net income	\$ 30,000

Figure 3.5 •

The major difference is in the need to know how to compute cost of goods manufactured as seen in the following comparison.

Figure	3.6	•
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Merchandising		Manufacturing	
Cost of goods sold 1. Merchandise inventory (B)	\$15,000	Cost of goods sold 1. Finished goods inventory (B)	\$15,000
2. Merchandise purchases	75,000	2. Cost of goods manufactured	75,000
Available for sale	90,000	Available for sale	90,000
3. Merchandise inventory (E)	30,000	3. Finished goods inventory (E)	30,000
	\$60,000 		\$60,000

The Cost of Goods Manufactured Statement

The major difference here is obviously in the need to know how to compute cost of goods manufactured. A second difference is that in a manufacturing business inventory that is sold is called finished goods rather than being called merchandise inventory and cost of goods manufactured has replaced merchandise purchases. Rather than purchasing goods from another company, the company manufactures what it sells. The accounting for finished goods is far more complicated than the accounting for merchandise purchased.

Figure 3.7 •

Cost of goods manufactured		
The five basic elements of cost of goods manufactured are:		
1. Materials used	\$ 20,000	
2. Factory labor	35,000	
3. Manufacturing overhead	25,000	
Manufacturing costs incurred this period	80,000	
4. Work in process inventory (B)	20,000	
Total manufacturing costs to be acct. for	100,000	
5. Work in process inventory (E)	25,000	
	\$ 75,000	

The purpose of the cost of goods manufactured statement is to compute the cost of goods completed or finished in a given time period. The cost of goods manufactured is the cost of goods finished this period. Cost of goods manufactured consists of three basic cost elements: (1) materials, (2) factory labor, and (3) manufacturing overhead. Materials used is a computation:

Materials Used		
1. Materials inventory (B)	\$ 5,000	
2. Material purchases	25,000	
Materials available	30,000	
3. Materials inventory (E)	10,000	
	\$20,000	

There are two types of inventory systems that may be used in a manufacturing business: (1) periodic and (2) perpetual. If a periodic inventory system is used, then it is necessary to compute materials used. If perpetual inventory is used, the inventory system keeps an accurate perpetual record of materials used and, consequently, it is not necessary to compute materials used. A record in the cost accounting system called Materials Used Summary is to record each use of material.

Balance Sheets: Merchandising and Manufacturing Compared

The balance sheet of a manufacturing business in terms of basic elements is identical to the balance sheet of a merchandising business. The only difference is in one area, the current asset section. Instead of one inventory account, the manufacturing business has three inventory accounts:

Merchandising Business		Manufacturing Bus	iness
1. Assets Current assets Cash Accounts receivable Merchandise inventory Fixed assets	\$ 50,000 30,000 65,000 \$ 55,000 \$200,000	1. Assets Current assets Cash Accounts receivable Inventory Work in process Materials Finished goods Fixed assets	\$ 50,000 30,000 25,000 10,000 30,000
 Liabilities Current liabilities Long-term liabilities Stockholders' Equity Paid-in capital Retained earnings 	\$ 20,000 30,000 120,000 \$200,000	 2. Liabilities Current liabilities Long-term liabilities 3. Stockholders' Equity Paid-in capital Retained earnings 	55,000 \$200,000 \$ 20,000 30,000 120,000 \$200,000

Manufacturing Business Transactions and Journal Entries

The manufacturing business has a number of unique transactions not found in a merchandising business. These transactions as a whole all fall into the manufacturing costs category. Basically, there are three types of manufacturing transactions:

- 1. Material
- 2. Factory labor
- 3. Manufacturing overhead

The most common of these three types of transactions are the following:

- 1. Purchase of raw materials
- 2. Freight on material purchased
- 3. Material returns and allowances
- 4. Incurrence of direct factory labor
- 5. Incurrence of manufacturing overhead

Examples of manufacturing overhead incurred include:

- 1. Indirect factory labor and indirect material
- 2. Factory utilities
- 3. Repairs and maintenance on factory equipment
- 4. Factory insurance
- 5. Depreciation on factory equipment

Examples of how to record material, factory labor, and manufacturing overhead transactions are now presented. These transactions are reflected in the adjusted trial balance on the next page.

Journal Entries for Basic Manufacturing Transactions				
	Transaction	Journal Entry	Debit	Credit
1	10,000 units of material X were purchased for \$12 per unit.	Material purchases Accounts payable	120,000	120,000
2	Invoice on freight received for material X, \$2,000.	Freight-in - materials Accounts payable	2,000	2,000
3	Damaged material X returned, \$5,000.	Accounts payable Material returns	5,000	5,000
4	Factory workers paid: Direct factory workers \$200,000 Indirect factory labor \$50,000	Factory labor - Direct Mfg. overhead - Indirect labor Payroll payable	200,000 50,000	250,000
5	Other Manufacturing overhead for the month was as follows:Factory utilities\$5,000Factory repairs and maintenance\$3,000Factory insurance\$4,000Factory supplies\$1,000	Manufacturing overhead Accounts payableFactory utilities\$5,000Repairs and main.\$3,000Factory insurance\$4,000Factory supplies\$1,000	13,000	13,000
6	Depreciation on plant & equipment, \$2,000	Mfg. overhead - plant deprec. Allowance for depreciation	2,000	2,000

Manufacturing End-of-Period Journal Entries

R and K Widget Company December 31, 20xx Adjusted Trial Balance			
	Debit	Credit	
Cash	177,000		
Accounts receivable	4,000		
Materials inventory	6,000		
Work in Process Inventory	8,000		
Finished goods Inventory	12,000		
Plant and equipment	50,000		
Accumulated depreciation, plant and equipment		5,000	
Accounts payable		9,000	
Common stock		40,000	
Retained earnings		100,000	
Sales		500,000	
Material purchases	120,000		
Materials returns		5,000	
Freight-in materials	2,000		
Direct factory labor	200,000		
Manufacturing overhead	65,000		
Rent, administrative building	8,000		
Salaries, general and administrative	2,000		
Office Supplies, general and administrative	5,000		
	659,000	659,000	

Additional information:

Materials inventory (ending)	\$ 8,000
Work in Process (ending)	\$12,000
Finished goods (ending)	\$11,000

In addition to these normal reoccurring periodic transactions, there are unique manufacturing end-of-period entries that must be made.

End-of-period entries must be made to record:

- 1. Transfer of materials inventory balance to cost of goods manufactured
- 2. Transfer of beginning material purchases to cost of goods manufactured
- 3. Transfer of materials freight-in to cost of goods manufactured
- 4. Transfer of manufacturing overhead incurred to cost of goods manufactured
- 5. Recording of ending balance of material inventory
- 6. Transfer of cost of goods manufactured account to cost of goods sold account
- 7. Transfer of finished goods account balance to cost of goods sold account
- 8. Recording of ending finished goods inventory

Based on this adjusted trial balance, the end-of-period entries for manufacturing costs would be as follows:

General Journal - End of Period Entries			
Date		Debit	Credit
Dec. 31	Cost of good manufactured	131,000	
	Materials return	5,000	
	Materials inventory		6,000
	Materials purchases		120,000
	Materials - freight in		2,000
	Work in process		8,000
Dec. 31	Cost of goods manufactured	200,000	
	Direct factory labor		200,000
Dec. 31	Cost of goods manufactured	65,000	
	Manufacturing overhead		65,000
Dec. 31	Materials inventory	8,000	
	Work in process	12,000	
	Cost of goods manufactured		20,000
Dec. 31	Cost of goods sold	388,000	
	Finished goods		12,000
	Cost of goods manufactured		376,000

Date	General Journal	Debit	Credit
Dec. 31	Finished goods	11,000	
	Cost of goods sold		11,000
Dec. 31	Sales	500,000	
	Income Summary		500,000
Dec. 31	Income Summary	452,000	
	Cost of goods sold		377,000
	Rent - administrative building		50,000
	Salaries - general and administration		20,000
	Office supplies		5,000
Dec. 31	Income Summary	48,000	
	Retained earnings		48,000

While the mechanics of preparing financial statements are important to the accountant, they are not that important to management. It is important that management understands financial statements in order to use information and relationships on the financial statements to make better decisions. As discussed at the beginning of this chapter, each element of financial statements has to be managed and for each element there are one or more identifiable set of decisions that affects that element. The important objective is for management to be able to associate certain decisions with assets, liabilities, capital, revenue, and expenses.

The Accounting Cycle for a Manufacturing Business

The accounting cycle for a manufacturing business is basically the same as the accounting cycle for a merchandising businesses. The major difference concerns how certain end-of-period journal entries are made for the manufacturing transactions. As illustrated above, a cost of goods manufactured account was used in the recording process. This particular account does not necessarily have to be used; however, if not used, some other account such as work-in-process has to be used for the same purpose. The accounting cycle may be summarized as follows:

- **Step 1** Make journal entries for regular during-the-period transactions including the transactions for manufacturing costs and post to the accounts in the general ledger.
- **Step 2** At the end of the operating period, prepare a trial balance.
- **Step 3** Make adjusting entries and post to the general ledger.

- Step 4 Prepare an adjusted trial balance.
- **Step 5** Prepare financial statements.
- **Step 6** Make end-of-the-period journal entries:
 - a. Make entries to transfer appropriate manufacturing costs to the cost of goods manufactured account.
 - b. Make regular closing entries for revenue and expense accounts.

Step 7 Prepare a post closing trial balance.

Please note that the above steps assume that making journal entries and posting are part of the same step.

Summary

In many respects, the financial statements of a manufacturing firm are similar to those of a retail type business. However, the existence of certain transactions concerning material, labor and overhead means that a manufacturing firm does have basic differences concerning inventory. Whereas a retail firm has one inventory account, typically called merchandise inventory, a manufacturing business has three basic inventory accounts: raw materials, work in process, and finished goods. In addition, because the cost of goods manufactured is critical, a manufacturing firm typically has a statement called cost of goods manufactured. The accounting for overhead in a manufacturing firm involves many complexities. The theory of accounting for manufacturing overhead is usually taught in courses in cost accounting. Except when necessary, the complexities of manufacturing overhead are not discussed in this text

QUESTIONS

- Q. 3.1 What three elements are necessary to compute cost of goods sold in a retail business?
- Q. 3.2 What three elements are necessary to compute cost of goods sold in a manufacturing business?
- Q. 3.3 What are five items of information are necessary to compute cost of goods manufactured?
- Q. 3.4 What elements are necessary to compute materials used?
- Q. 3.5 What does cost of goods manufactured represent?
- Q. 3.6 As the income statement is typically prepared, what are the main elements that make up the income statement?
- Q. 3.7 How does the current asset section of the balance sheet for a manufacturing business differ from the current asset section of the balance sheet for a retail business?

EXERCISES

Exercise 3.1 • Cost of Goods sold

You have been provided the following information:

Retail Business		Manufacturing Business	
Cash	\$ 10,000	Cash	\$ 20,000
Accounts receivable	\$ 50,000	Accounts receivable	\$ 60,000
Merchandise inventory (BI)	\$ 12,000	Cost of goods manufactured	\$150,000
Freight-in	\$ 1,000	Finished goods (beginning)	\$ 25,000
Merchandise purchases	\$200,000	Finished goods (ending)	\$ 15,000
Merchandise inventory (EI)	\$ 20,000	Selling expenses	\$ 60,000
Selling expenses	\$ 50,000		

Based on the above information, compute cost of goods sold for both types of businesses. Some of the above information is not required.

Exercise 3.2 • Cost of Goods Manufactured

Based on the following information, prepare a cost of goods manufactured statement.

\$90,000
\$60,000
\$30,000
\$25,000
\$10,000
\$ 5,000
\$85,000
\$30,000
\$15,000
\$20,000

Exercise 3.3 • Income Statement

Based on the following information, prepare an income statement. Note: Some of the information provided is not needed.

Sales	\$300,000
Sales returns	\$ 50,000
Finished goods inventory (beginning)	\$ 30,000
Finished goods inventory (ending)	\$ 25,000
Materials used	\$ 70,000
Factory labor	\$ 45,000
Manufacturing overhead	\$ 30,000
Work in process (BI)	\$ 11,000
Work in process (EI)	\$ 5,000
Cash	\$ 40,000
Selling expenses	\$ 35,000
General and administrative expenses	\$ 25,000
Accounts receivable	\$ 15,000

Exercise 3.4 • Balance Sheet

Based on the following information, prepare a balance sheet. Note: Some of the information provided is not needed.

Accounts receivable	\$ 60,000
Plant and Equipment	\$100,000
Allowance for depreciation, P & E	\$ 10,000
Cash	\$ 80,000
Finished Goods inventory (ending)	\$ 15,000
Notes payable (5 year note)	\$ 55,000
Accounts payable	\$ 15,000
Bonds payable	\$ 60,000
Retained earnings	\$ 80,000
Common stock	\$120,000
Payroll payable	\$ 20,000
Materials inventory (ending)	\$ 20,000
Work in process inventory (ending)	\$ 15,000
Furniture and equipment	\$ 80,000
Allowance for depreciation, F & F	\$ 10,000

R and K Widget Company December 31, 20xx Adjusted Trial Balance		
	Debit	Credit
Cash	11,700	
Accounts receivable	400	
Materials inventory	2,600	
Work in process inventory	1, 800	
Finished goods inventory	1,200	
Plant and equipment	5,000	
Accumulated depreciation, plant and equipment		500
Accounts payable		8,600
Common stock		6,000
Retained earnings		11,000
Sales		40,000
Direct factory labor	13,600	
Material purchases	11,900	
Depreciation, plant and equipment	2,000	
Freight-in materials	1,100	
Insurance and taxes, plant and equipment	200	
Indirect factory labor	5,800	
Rent, administrative building	5,500	
Salaries, general and administrative	2,300	
Office supplies, general and administrative	1,000	
	66,100	66,100

Exercise 3.5 • Financial Statements and Closing Entries

Additional information:

Materials inventory (ending)	\$ 2,800
Work in Process (ending)	\$ 3,200
Finished goods (ending)	\$ 2,100

Continued on following page

Required:

From the above adjusted trial balance, prepare:

- 1. A cost of goods manufactured statement
- 2. An income statement
- 3. A balance sheet

Also, make the journal entries necessary to close the accounts.