7 Accounting Information Systems

Special Section

To demonstrate the projects in this chapter, use the Special Section located at the end of this binder. Included in this section are Demo Docs and Textbook Exercises.

Learning Objectives

1 Describe an effective accounting information system

2 Understand both computerized and manual accounting systems

3 Understand how spreadsheets are used in accounting

4 Use the sales journal, the cash receipts journal, and the accounts receivable ledger

5 Use the purchases journal, the cash payments journal, and the accounts payable ledger

You've just started a small business, In Motion, to print T-shirts with club and party logos at your college. With everyone wearing T-shirts, you can make a little money while in school. You've lined up a supplier of Hanes Beefy Tee T-shirts, and a local printer can imprint the logos. It's early in the semester and parties are in full swing. With an order for 100 T-shirts you're ready to go. What's your next step?

At some point you'll need to keep track of your cash and other assets. You'll want to measure In Motion's performance. That brings us back to accounting. The early chapters of this book have shown how to:

- set up your ledger
- record transactions
- adjust and close the books
- prepare the financial statements

Think of handling all this accounting manually—one journal entry at a time. Even for your small business, that would be quite a task. ■

In this chapter we describe the features of an effective information system. This background will help you design an accounting system for your business. The second half of the chapter covers special journals that can be used for repetitive transactions. They can save you lots of time, and that will enable you to hustle more business. Let's begin by seeing what makes for a good accounting system.

An Effective Accounting Information System

1 Describe an effective accounting information system

Good design features make an accounting system run smoothly. An effective system provides:

- Control
- Compatibility
- Flexibility
- A good cost/benefit relationship

Control

An owner must *control* the business. Internal controls can safeguard your assets and eliminate waste. For example, you need procedures for making cash payments. Designate a trusted employee to review incoming bills before writing checks. If you extend credit to customers, you'll need accounts receivable records to ensure that you collect cash on time.

Compatibility

A *compatible* system works smoothly with your personnel and organizational structure. Your small T-shirt business doesn't need a big accounting system. You can probably do your accounting with software such as QuickBooks or Peachtree. But a large company needs a different system. For example, Bank of America has hundreds of branch offices. Managers track revenues in each region where the bank operates. If revenues in Texas are lagging, managers can focus on the Texas banks.

Flexibility

Your accounting system must be *flexible* to accommodate changes in your business over time. In Motion may start selling some new products, such as baseball caps. You may expand to other colleges and universities. That will require a more complicated accounting system.

A Good Cost/Benefit Relationship

Control, compatibility, and flexibility cost money. You need a system that gives the *most benefit for the least cost*. QuickBooks may be the most economical way to do your accounting. Or it may be cheaper to hire a CPA firm. Most CPAs will process your data at a reasonable cost. Simply give your business documents—incoming bills, sales invoices, and so on—to your CPA each month, and let him or her do your accounting.

All these features are needed whether the accounting system is computerized or manual. Let's start with a computerized system.

Components of a Computerized System

A computerized accounting system has two basic components:

- Hardware
- Software

Hardware is the electronic equipment: computers, monitors, printers, and the network that connects them. Most systems require a **network** to link computers. In a networked system, the **server** stores the program and the data. With a network, a PriceWaterhouseCoopers auditor in London can work on the data of a client in Sydney, Australia. The result is a speedier audit for the client.

Software is the set of programs that drives the computer. Accounting software reads, edits, and stores transaction data. It also generates the reports you can use to run the business. Many software packages are flexible. For example, a chain of gas stations may be only partly computerized. This small business may use the computer for employee payrolls. Other parts of the accounting system may be manual.

How Computerized and Manual Systems Work

2 Understand both computerized and manual accounting systems

Data processing includes three steps—inputs, processing, and outputs—as shown in Exhibit 7-1.

EXHIBIT 7-1   The Three Stages of Data Processing

INPUTS   PROCESSING   OUTPUTS
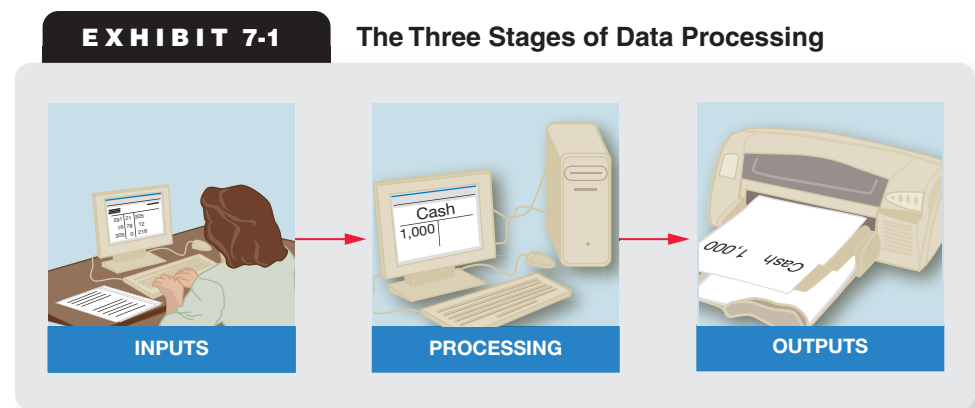
Inputs

Inputs come from source documents, such as orders received from customers and sales invoices faxed to customers. Inputs are usually grouped by type. For example, you would enter cash sales separately from sales on account.

Processing

In a manual system, *processing* includes journalizing transactions, posting to the accounts, and preparing the financial statements. A computerized system can process transactions without the intermediate steps (journal, ledger, and trial balance).
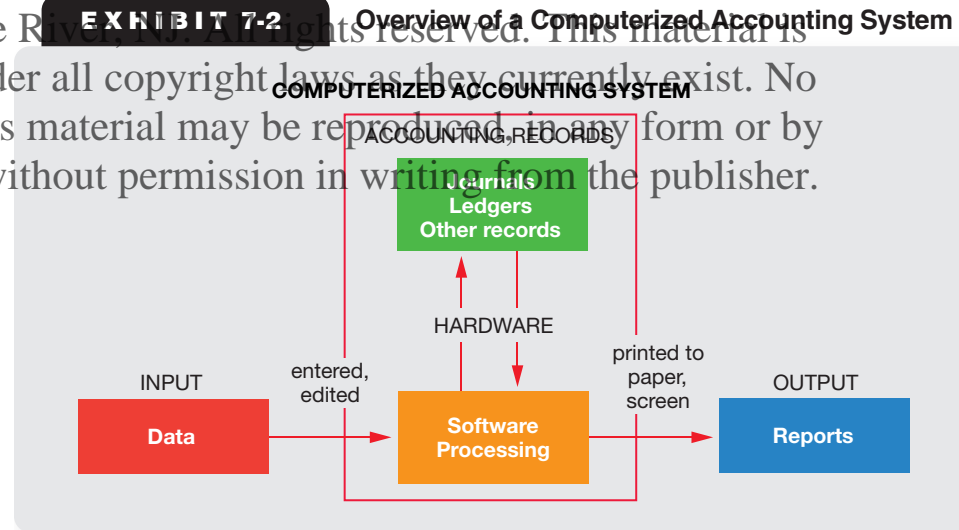
Outputs

Outputs are the reports used for decision making, including the financial statements. You can make better decisions with the reports produced by a good accounting system. Exhibit 7-2 diagrams a computerized system. Start with data inputs in the lower left corner.

E X H I B I T 7-2   Overview of a Computerized Accounting System

COMPUTERIZED ACCOUNTING SYSTEM

ACCOUNTING RECORDS

Journals
Ledgers
Other records

HARDWARE

INPUT

Data

entered, edited

Software Processing

printed to paper, screen

OUTPUT

Reports

Data are processed into accounting records and printed out as reports.

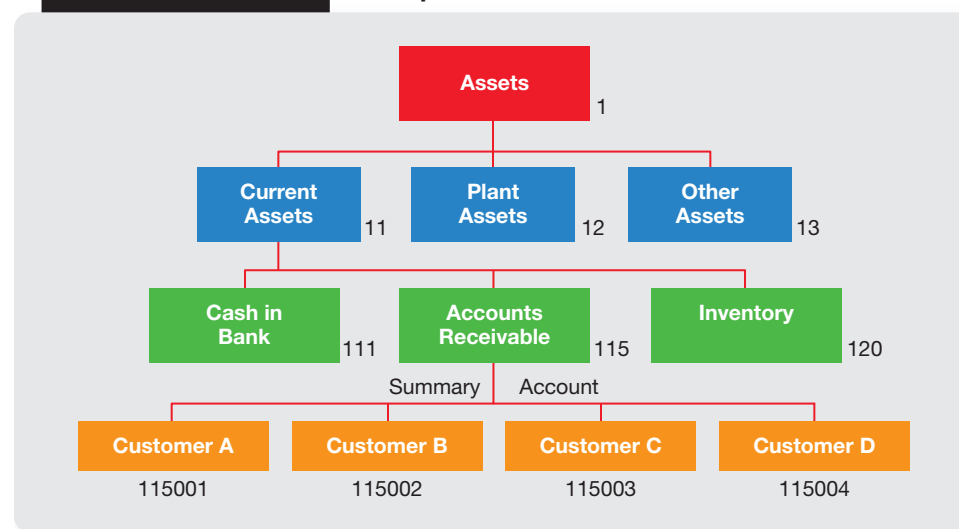## Designing a System: The Chart of Accounts

As we saw in Chapter 2, an accounting system begins with the chart of accounts. In most companies, account *numbers* take on added importance. Recall that asset accounts generally begin with the digit 1, liabilities with a 2, owner's equity with a 3, revenues with 4, and expenses with 5. Exhibit 7-3 diagrams one structure for

Pitfalls to Avoid

The customer accounts are not additional general ledger accounts. They comprise an Accounts Receivable *subsidiary ledger.* Accounts Receivable is a *control account;* the balance of the Accounts Receivable account in the general ledger should be equal to the sum of all of the customer account balances in the Accounts Receivable subsidiary ledger.

E X H I B I T 7-3   Account-Number Structure for Computerized Accounts

Assets
1

Current Assets
11

Plant Assets
12

Other Assets
13

Cash in Bank
111

Accounts Receivable
115

Inventory
120

Summary   Account

Customer A
115001

Customer B
115002

Customer C
115003

Customer D
115004

FYI

Sometimes a suffix can be added to the account to indicate the related division, department, or product. It increases the number of possible account choices, but it also serves to accumulate specific financial information that may be useful to make decisions.

computerized accounts. Assets are divided into current assets, plant assets (property, plant, and equipment), and other assets. Among the current assets, we illustrate only three accounts: Cash in Bank (Account No. 111), Accounts Receivable (No. 115), and Inventory (No. 120).

The account numbers in Exhibit 7-3 get longer and more detailed as you move from top to bottom. For example, Customer A's account number is 115001: 115 represents Accounts Receivable, and 001 refers to Customer A.
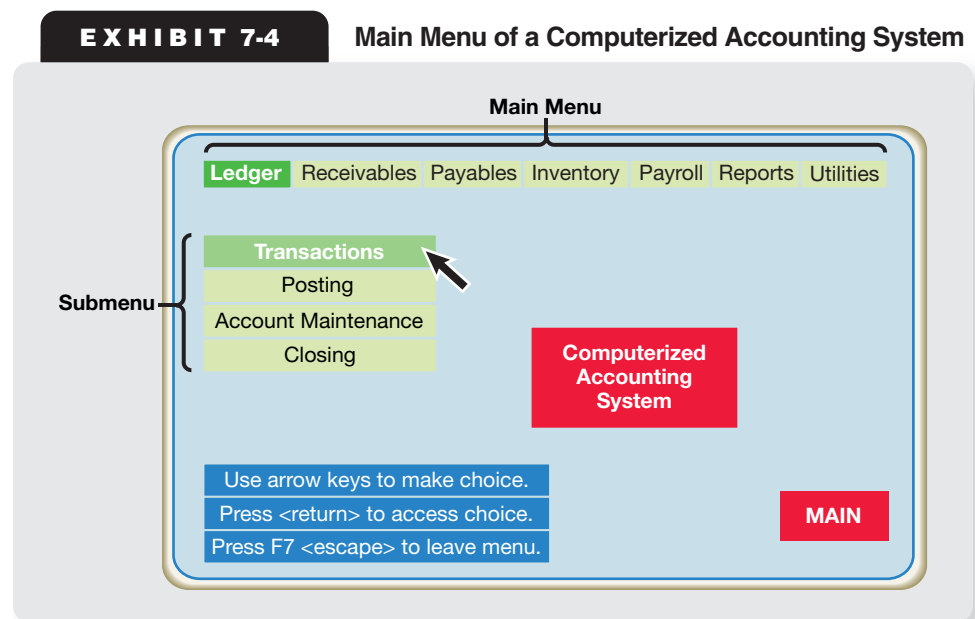
Processing Transactions: Manual and Menu-Driven Systems

Recording transactions in an actual accounting system requires an additional step that we have skipped thus far. A business of any size classifies transactions by type for efficient handling. In a manual system, credit sales, cash receipts, purchases on account, and cash payments are treated as four separate categories. Each category of transactions has its own special journal. For example:

- Credit sales are recorded in a *sales journal.*
- Cash receipts are recorded in a *cash receipts journal.*
- Purchases of inventory and other assets on account are recorded in a *purchases journal.*
- Cash payments are recorded in a *cash payments journal.*
- Transactions that do not fit any of the special journals, such as adjusting entries, are recorded in the *general journal,* which serves as the "journal of last resort."

Computerized systems are organized by function, or task. You can select a functions, such as recording sales on account, from a menu. A **menu** is a list of options for choosing computer functions. In a *menu-driven* system, you first access the *main menu.* Then choose from a submenu until you reach the function you want.

Exhibit 7-4 illustrates one type of menu structure. The menu bar at the top gives the main menu. In the diagram the accountant has chosen the ledger option highlighted by the cursor. This action opened a submenu of four items: Transactions,

E X H I B I T 7-4   **Main Menu of a Computerized Accounting System**

Posting, Account Maintenance, and Closing. The Transactions option was then chosen (highlighted).

Posting in a computerized system can be performed continuously (**online processing**) or later for a group of similar transactions (**batch processing**). The posting then updates the account balances.

Enterprise Resource Planning (ERP) Systems

Many small businesses use QuickBooks or Peachtree. But larger companies are using **ERP (enterprise resource planning)** systems to manage their data. ERP systems such as SAP, Oracle, and PeopleSoft can integrate all company data into a single **data warehouse**. ERP feeds the data into software for all company activities—from purchasing to production and customer service.

Advantages of ERP systems include:

- A centralized ERP system can save lots of money.
- ERP helps companies adjust to changes. A change in sales ripples through the purchasing, shipping, and accounting systems.
- An ERP system can replace separate software systems, such as sales and payroll.

ERP is expensive. Major installations can cost millions. Implementation also requires a large commitment of time and people. For example, Hershey Foods tried to shrink a four-year ERP project into two and a half years. The result? The software did not map into Hershey's operations, and disrupted deliveries hurt profits in the Halloween candy-buying season.

Integrated Accounting Software: Spreadsheets

3 Understand how spreadsheets are used in accounting

Spreadsheets are computer programs that link data by means of formulas and functions. Spreadsheets are organized by *cells,* each defined by a row and a column. A cell can contain:

- Words (labels), such as Assets, Current assets, or Sales revenue, to identify an item.
- Numbers, such as 10,000, for the balance of Cash or Accounts receivable. Use a *number* if its amount will not change.
- Formulas, where you need to compute an amount that may change. Examples of formulas include:
  a. Current assets + Plant assets + Other assets = Total assets
  b. Revenues − Expenses = Net income
  c. Current assets/Current liabilities = Current ratio

The *cursor,* or electronic highlighter, indicates which cell is active. When the cursor is placed over any cell, information can be entered there for processing.

Exhibit 7-5 shows an income statement on a spreadsheet screen. The labels were entered in cells A1 through A4. The dollar amount of revenues was entered in cell B2 and expenses in cell B3. A formula was placed in cell B4 as follows: =B2–B3. This formula computes net income in cell B4. If revenues increase to $170,000, net income automatically increases to $80,000. No other cells will change.

The power of a spreadsheet is apparent when large amounts of data are analyzed. Change only one number, and you save hours of manual calculations. Exhibit 7-6 shows the basic arithmetic operations in Excel.

EXHIBIT 7-5   **A Spreadsheet Screen**

Formula for B4: = B2-B3

Column:	A	B	C
Row: 1	Income Statement:		
2	Revenues	150,000	
3	Expenses	90,000	
4	Net Income	60,000	
5			

Cursor is on cell B4.

FYI

You may use tax software programs such as TaxCut or Turbo Tax or pay a tax preparer to complete your tax return. In any case, the programs used are similar to a spreadsheet. Formulas in the software allow for immediate recalculations of your taxable income and income taxes with each change to the information.

EXHIBIT 7-6   **Basic Arithmetic Operations in Excel Spreadsheets**

Operation	Symbol
Addition	+
Subtraction	−
Multiplication	*
Division	/
Addition of a range of cells	=SUM (beginning cell:ending cell)
Examples:	
Add cells A2 through A9	=SUM (A2:A9)
Divide cell C2 by cell D1	=C2/D1

Special Journals

Exhibit 7-7 diagrams an accounting system for In Motion, your T-shirt business. The remainder of this chapter describes how this system works.

E X H I B I T 7-7   **Overview of an Accounting System with Special Journals**

Input
Business Documents

Sales Invoices | Bank Deposits | Purchase Invoices and Sales Invoices | Purchase Invoices | Checks | Employee Time Sheets | Journal Entries

Processing
Processing of Accounting Data

Sales/Accounts Receivable | Cash Receipts | Inventory | Accounts Payable | Cash Payments | Payroll | General Journal

General Ledger

Output
Accounting Reports

Financial Statements | Other Reports
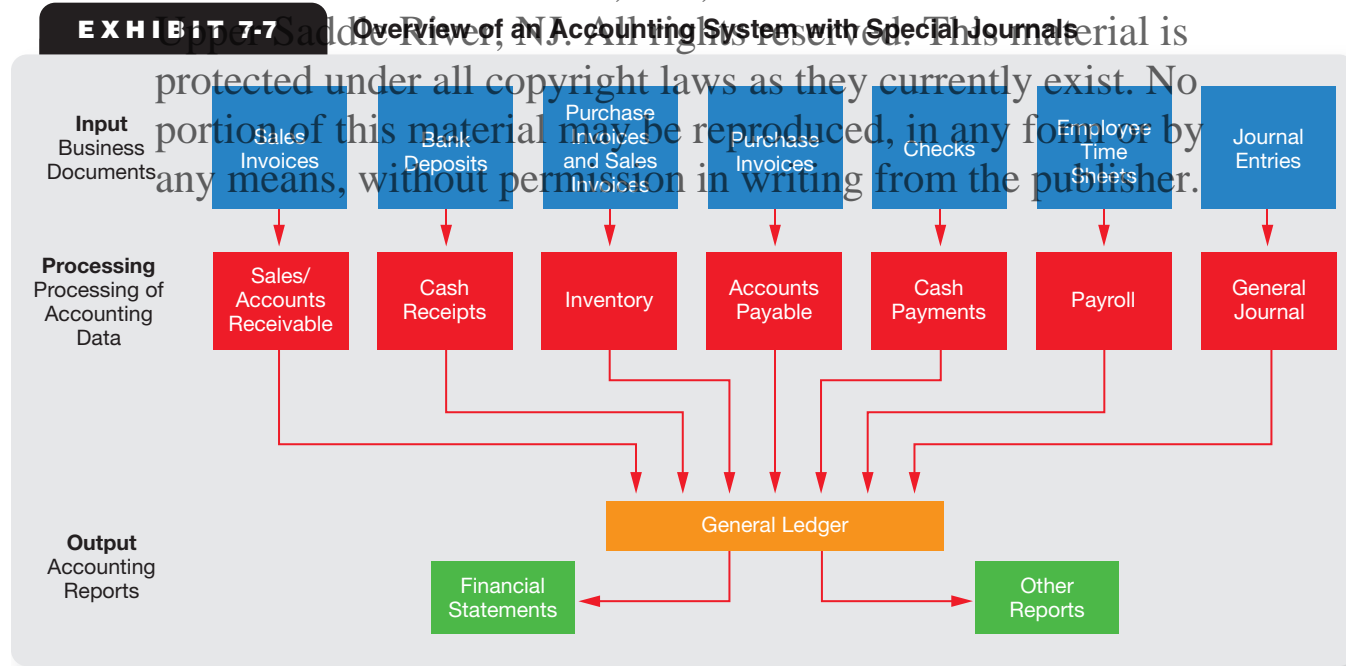
4 Use the sales journal, the cash receipts journal, and the accounts receivable ledger

Special Journals in a Manual System

The journal entries illustrated so far have used the **general journal**. It is inefficient to record all transactions in the general journal, so we use special journals. A **special journal** is an accounting journal designed to record a specific type of transaction.

Most transactions fall into one of five categories, so accountants use five different journals. This system saves time and money. The five types of transactions, the related special journal, and the posting abbreviation follow.

Transaction	Special Journal	Posting Abbreviation
1. Sale on account	Sales journal	S
2. Cash receipt	Cash receipts journal	CR
3. Purchase on account	Purchases journal	P
4. Cash payment	Cash payments journal	CP
5. All others	General journal	J

Transactions are recorded in either a special journal or the general journal, but not in both. You may be wondering why we cover manual accounting systems, since many businesses have computerized. There are three main reasons:

1. Learning a manual system will equip you to work with both manual and electronic systems. The accounting is the same regardless of the system.

2. Few small businesses have computerized all their accounting. Even companies that use QuickBooks or Peachtree keep some manual accounting records.

3. Learning a manual system will help you master accounting. One of the authors of this book has a friend who uses QuickBooks for his business. This man knows only which keys to punch. If he knew the accounting, he could better manage his business.

The Sales Journal

Most merchandisers sell inventory on account. These credit sales are entered in the **sales journal.** Credit sales of assets other than inventory—for example, buildings—occur infrequently and are recorded in the general journal.

Exhibit 7-8 illustrates a sales journal (Panel A) and the related posting to the ledgers (Panel B) of In Motion, your T-shirt business. Each entry in the Accounts Receivable Dr./Sales Revenue Cr. column of the sales journal in Exhibit 7-8 debits (Dr.) Accounts Receivable and credits (Cr.) Sales Revenue, as the heading indicates. For each transaction, the accountant enters the:

- date
- invoice number
- customer name
- transaction amount

This streamlined way of recording sales saves time.

In previous chapters, we did not record the names of our customers. In practice, the business must know the amount receivable from each customer. How else can the company ensure that it collects its receivables?

Consider the first transaction in Panel A. On November 2, you sold goods on account to Maria Galvez for $935. The invoice number is 422. All this information appears on a single line in the sales journal. No explanation is necessary. The transaction debits Accounts Receivable—Maria Galvez and credits Sales Revenue.

In Motion, like most other companies, uses a *perpetual* inventory system. Throughout this chapter we illustrate the perpetual system. When recording a sale, you also must record the cost of the goods sold and the decrease in your T-shirt inventory.

Computerized accounting systems can read both the sales amount and the cost of goods sold from the bar code on the package. The far right column of the sales journal records the cost of goods sold and inventory entry—$505 for the goods sold to Maria Galvez. If In Motion used a *periodic* inventory system, you would not record cost of goods sold or the decrease in inventory at the time of sale. The sales journal would need only one column to debit Accounts Receivable and credit Sales Revenue.

Pitfalls to Avoid

Although the look of the special journals is very different from the general journal, remember that each transaction must be recorded with equal amounts of debits *and* credits.

Posting to the General Ledger

The only ledger we've used so far is the **general ledger**, which holds the financial statement accounts. We will soon introduce other ledgers.

Posting from the sales journal to the general ledger can be done only at the end of the month. In Exhibit 7-8 (Panel A), November's credit sales total $4,319. When the $4,319 is posted to Accounts Receivable and Sales Revenue, you can print their account numbers beneath the total in the sales journal. In Panel B of Exhibit 7-8, the account number for Accounts Receivable is 115 and the account number for Sales Revenue is 410. Printing these account numbers in the sales journal shows that the $4,319 has been posted to the two accounts.

The debit to Cost of Goods Sold and the credit to Inventory for the monthly total of $1,814 is also posted at the end of the month. After posting, these accounts'

E X H I B I T 7-8   **Sales Journal (Panel A) and Posting to the Ledgers (Panel B)**

PANEL A—Sales Journal:

Sales Journal					Page 3
Date	Invoice No.	Customer Account Debited	Post Ref.	Accounts Receivable Dr. Sales Revenue Cr.	Cost of Goods Sold Dr. Inventory Cr.
2008					
Nov. 2	#422	Maria Galvez	✓	935	505
13	423	Brent Harmon	✓	694	361
18	424	Susan Levy	✓	907	517
27	425	Clay Schmidt	✓	1,783	431
30		Total		4,319	1,814
				(115/410)	(511/131)

Individual accounts receivable are posted daily.

Totals can be posted at the end of the month.

Totals can be posted at the end of the month.

PANEL B—Posting to the Ledgers:

Accounts Receivable Subsidiary Ledger

General Ledger

Maria Galvez

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 2	S.3	935		935

Accounts Receivable   No. 115

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 30	S.3	4,319		4,319

Brent Harmon

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 13	S.3	694		694

Inventory   No. 131

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 30	Bal.			3,885
30	S.3		1,814	2,071

Susan Levy

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 18	S.3	907		907

Sales Revenue   No. 410

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 30	S.3		4,319	4,319

Clay Schmidt

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 27	S.3	1,783		1,783

Cost of Goods Sold   No. 511

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 30	S.3	1,814		1,814

numbers are entered beneath the total to show that Cost of Goods Sold and Inventory have been updated.

Posting to the Accounts Receivable Subsidiary Ledger

The $4,319 debit to Accounts Receivable does not identify the amount receivable from each customer. A business may have many customers.

You must create an account for each customer in a subsidiary ledger called the **Accounts Receivable ledger**. A **subsidiary ledger** holds individual accounts that support a general ledger account. The customer accounts in the subsidiary ledger are arranged in alphabetical order (Galvez, then Harmon, then Levy, and so on).

Amounts in the sales journal are posted to the subsidiary ledger *daily* to keep a current record of the amount receivable from each customer. Suppose Maria Galvez telephones In Motion to ask how much she owes. The subsidiary ledger shows that Galvez owes $935.

After posting to the subsidiary ledger, print a check mark in the posting reference column of the sales journal (see Exhibit 7-8). That lets you know you've posted $935 to Galvez's account.

Journal References in the Ledgers

As you post to the ledgers, print the journal page number in the account to show the source of the data. All transaction data in Exhibit 7-8 originated on page 3 of the sales journal, so all journal references are S.3. "S" indicates sales journal.

Trace all the postings in Exhibit 7-8. The way to learn an accounting system is to study the flow of data. The arrows indicate the direction of the information.

Balancing the Ledgers

The Accounts Receivable balance in the general ledger should equal the sum of the individual customer balances in the subsidiary ledger, as follows. This is called balancing the ledgers.

GENERAL LEDGER

Accounts Receivable debit balance	$4,319

SUBSIDIARY LEDGER: CUSTOMER ACCOUNTS RECEIVABLE

Customer	Balance
Maria Galvez..	$ 935
Brent Harmon	694
Susan Levy	907
Clay Schmidt...	1,783
Total accounts receivable..................................	$4,319

Accounts Receivable in the general ledger is called a **control account**. A control account's balance equals the sum of the balances of accounts in a subsidiary ledger.

Using Documents as Journals

You can streamline your accounting even further. Simply use your business documents as journals. This saves time and money. For example, In Motion could keep sales invoices in a loose-leaf binder and let the invoices serve as the sales journal. At

the end of the period, simply total your sales on account and post the total as a debit to Accounts Receivable and a credit to Sales Revenue. You can also post directly from the invoices to the customer accounts in the accounts receivable ledger.

The Cash Receipts Journal

All businesses have lots of cash transactions, and a **cash receipts journal** comes in handy. Exhibit 7-9 illustrates the cash receipts journal of In Motion T-Shirts. Posting to the ledgers is shown in Panel B.

Every transaction recorded in this journal is a cash receipt, so there's a column for debits to Cash. The next column is for debits to Sales Discounts. The main sources of cash are cash sales and collections on account.

The cash receipts journal has credit columns for Accounts Receivable, Sales Revenue, and Other Accounts. This Other Accounts column is also used to record the names of customers from whom cash is collected on account.

In Exhibit 7-9, the first cash sale occurred on November 6. Observe the debit to Cash and the credit to Sales Revenue ($517). Each sale entry is accompanied by a separate entry that debits Cost of Goods Sold and credits Inventory for the cost of the merchandise sold. The column for this entry is at the far right of the journal.

On November 11, In Motion borrowed $1,000 from First Bank. Cash is debited, and Note Payable to First Bank is credited. We use the Other Accounts column because there is no specific credit column for borrowings. For this transaction, we print the account title, Note Payable to First Bank, in the Other Accounts/Account Title column.

The November 11 and 25 transactions illustrate a key fact. Different companies have different types of transactions, and they adapt special journals to their needs. In this case, the Other Accounts column is the catchall used to record all non-routine cash receipts.

On November 14, In Motion collected $900 from Maria Galvez. Back on November 2, we sold $935 of merchandise to Galvez. This credit sale allowed a $35 discount for prompt payment, and Galvez paid within the discount period. In Motion records this cash receipt by debiting Cash and Sales Discounts and by crediting Accounts Receivable for $935. The customer's name appears in the Other Accounts/Account Title column.

In the cash receipts journal, as in all the journals, total debits should equal total credits. For the month, total debits ($6,169 = $6,134 + $35) equal total credits ($6,169 = $1,235 + $3,172 + $1,762). The debit to Cost of Goods Sold and the credit to Inventory are completely separate.

Posting to the General Ledger

Column totals can be posted monthly. After posting, print the account number below the column total in the cash receipts journal. The account number for Cash (101) appears below the column total, and likewise for the other column totals. Follow the arrows, which track the posted amounts.

The column total for *Other Accounts* is *not* posted. Instead, these credits are posted individually. In Exhibit 7-9, the November 11 transaction reads "Note Payable to First Bank." This account's number (221) in the Post. Ref. column shows that the transaction amount was posted individually. The letter x below the column means that the column total was *not* posted.

Posting to the Subsidiary Ledger

Amounts from the cash receipts journal are posted to the accounts receivable ledger daily. The postings are credits. Trace the $935 credit to Maria Galvez's account. It reduces her balance to zero. The $300 receipt from Brent Harmon reduces his balance to $394.

EXHIBIT 7-9 **Cash Receipts Journal (Panel A) and Posting to the Ledgers (Panel B)**

PANEL A—Cash Receipts Journal:

	Debits		Credits					Page 5
					Other Accounts			
Date	**Cash**	**Sales Discounts**	**Accounts Receivable**	**Sales Revenue**	**Account Title**	**Post Ref.**	**Amount**	**Cost of Goods Sold Dr. Inventory Cr.**
2008								
Nov. 6	517			517				290
11	1,000				Note Payable to First Bank	221	1,000	
14	900	35	935		Maria Galvez			
18	858		853					426
22	300		300		Brent Harmon			
25	762				Interest Revenue	460	762	
28	1,802			1,802				991
30	6,134	35	1,235	3,172	Totals		1,762	1,707
	(101)	(420)	(115)	(410)			(X)	(511/131)

Totals can be posted at the end of the month.	Individual accounts receivable are posted daily.	Individual amounts can be posted at the end of the month.	Total is not posted.	Totals can be posted at the end of the month.

PANEL B—Posting to the Ledgers:

Accounts Receivable Subsidiary Ledger

Maria Galvez

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 2	S.3	935		935
14	CR.5		935	-0-

Brent Harmon

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 13	S.3	694		694
22	CR.5		300	394

Susan Levy

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 18	S.3	907		907

Clay Schmidt

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 27	S.3	1,783		1,783

General Ledger

Cash — No. 101

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	CR.5	6,134		6,134

Accounts Receivable — No. 115

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	S.3	4,319		4,319
30	CR.5		1,235	3,084

Inventory — No. 131

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	Bal.			3,885
30	S.3		1,814	2,071
30	CR.5		1,707	364

Note Payable to First Bank — No. 221

Date	Jrnl. Ref.	Debit	Credit	Credit Balance
Nov. 11	CR.5		1,000	1,000

Sales Revenue — No. 410

Date	Jrnl. Ref.	Debit	Credit	Credit Balance
Nov. 30	S.3		4,319	4,319
30	CR.5		3,172	7,491

Sales Discounts — No. 420

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	CR.5	35		35

Interest Revenue — No. 460

Date	Jrnl. Ref.	Debit	Credit	Credit Balance
Nov. 25	CR.5		762	762

Cost of Goods Sold — No. 511

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	S.3	1,814		1,814
30	CR.5	1,707		3,521

Balancing the Ledgers

After posting, the sum of the individual balances in the accounts receivable ledger equals the balance of Accounts Receivable in the general ledger, as follows:

GENERAL LEDGER

Accounts Receivable debit balance............................ $3,084

SUBSIDIARY LEDGER: CUSTOMER ACCOUNTS RECEIVABLE

Customer	Balance
Brent Harmon	$ 394
Susan Levy	907
Clay Schmidt	1,783
Total accounts receivable.................................	$3,084

The Purchases Journal

A merchandising business such as In Motion T-Shirts purchases inventory and supplies on account. The **purchases journal** handles these transactions plus expenses incurred *on account*. Cash purchases are recorded in the cash payments journal.

Exhibit 7-10 illustrates In Motion's purchases journal (Panel A) and posting to the ledgers (Panel B).[1] This purchases journal has special columns for:

- Credits to Accounts Payable
- Debits to Inventory, Supplies, and Other Accounts

A periodic inventory system would replace the Inventory column with a column titled "Purchases." The Other Accounts columns hold purchases of items other than inventory and supplies. Accounts Payable is credited for all transactions recorded in the purchases journal.

On November 2, In Motion purchased inventory costing $700 from Hanes Textiles. The supplier's name (Hanes) is entered in the Supplier Account Credited column. The purchase terms of 3/15, n/30 are also entered to show the due date and the discount available. Accounts Payable is credited for the transaction amount, and Inventory is debited.

Note the November 9 purchase of equipment from City Office Supply. The purchases journal holds no column for equipment, so we use the Other Accounts debit column. Because this was a credit purchase, the accountant prints the supplier name (City Office Supply) in the Supplier Account Credited column and Equipment in the Other Accounts/Account Title column. The total credits in the purchases journal ($2,876) must equal the total debits ($2,876 = $1,706 + $103 + $1,067).

Accounts Payable Subsidiary Ledger

To pay debts on time, a company must know how much it owes each supplier. Accounts Payable in the general ledger shows only a single total for the amount

---

[1]This is the only special journal with the credit column placed to the left and the debit columns to the right. The focus is on Accounts Payable (which is credited for each entry to this journal).

EXHIBIT 7-10   Purchases Journal (Panel A) and Posting to the Ledgers (Panel B)

PANEL A—Purchases Journal:

	Purchases Journal							Page 8		
				Credits	Debits					
							Other Accounts			
Date	Supplier Account Credited	Terms	Post Ref.	Accounts Payable	Inventory	Supplies	Account Title	Post Ref.	Amount	
2008										
Nov. 2	Hanes Textiles	3/15, n/30	✓	700	700					
5	Pioneer Plastics	n/30	✓	319	319					
9	City Office Supply	2/10, n/30	✓	440			Equipment	191	440	
12	Advanced Printing	n/30	✓	236	236					
13	Hanes Textiles	3/15, n/30	✓	451	451					
19	City Office Supply	2/10, n/30	✓	103		103				
23	O'Leary Furniture	n/60	✓	627			Furniture	181	627	
30	Totals			2,876	1,706	103			1,067	
				(210)	(131)	(161)			(X)	

Individual accounts payable are posted daily.

Totals can be posted at the end of the month.

Total is not posted.

Individual amounts can be posted at the end of the month.

PANEL B—Posting to the Ledgers:

Accounts Payable Subsidiary Ledger

Advanced Printing

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 12	P.8		236	236

City Office Supply

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 9	P.8		440	440
19	P.8		103	543

Hanes Textiles

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 2	P.8		700	700
13	P.8		451	1,151

O'Leary Furniture

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 23	P.8		627	627

Pioneer Plastics

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 5	P.8		319	319

General Ledger

Inventory   **No. 131**

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	P.8	1,706		1,706

Supplies   **No. 161**

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	P.8	103		103

Furniture   **No. 181**

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 23	P.8	627		627

Equipment   **No. 191**

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 9	P.8	440		440

Accounts Payable   **No. 210**

Date	Jrnl. Ref.	Debit	Credit	Credit Balance
Nov. 30	P.8		2,876	2,876

owed on account. It does not indicate the amount owed to each supplier. Companies keep an accounts payable ledger that is similar to the accounts receivable ledger.

The accounts payable ledger lists suppliers in alphabetical order, along with amounts owed to them. Exhibit 7-10, Panel B, shows In Motion's accounts payable ledger, which includes accounts for Advanced Printing, City Office Supply, and others. After all the posting, the total of the individual balances in the subsidiary ledger equals the Accounts Payable balance in the general ledger.

Posting from the Purchases Journal

Posting from the purchases journal is similar to posting from the other special journals. Exhibit 7-10, Panel B, illustrates the posting process.

Individual accounts payable in the *accounts payable ledger* are posted daily, and column totals and other amounts to the *general ledger* at the end of the month. In the ledger accounts, P.8 means purchases journal page 8.

The Cash Payments Journal

Businesses make most cash payments by check, and all checks are recorded in the **cash payments journal**. This special journal is also called the **check register** and the **cash disbursements journal.** Exhibit 7-11 shows the cash payments journal, with the ledgers in Panel B.

The cash payments journal has two debit columns—one for Other Accounts and one for Accounts Payable. It has two credit columns—one for Inventory (for purchases discounts) and one for Cash. This special journal also has columns for the date and for the check number of each cash payment.

All entries in the cash payments journal include a credit to Cash. Payments on account are debits to Accounts Payable. On November 15, In Motion paid Hanes on account, with credit terms of 3/15, n/30 (for details, see the first transaction in the purchases journal, Exhibit 7-10). Paying within the discount period, you took the 3% discount and paid $679 ($700 less the $21 discount). The discount is credited to Inventory.

The Other Accounts column is used to record debits to accounts for which no special column exists. For example, on November 3, In Motion paid rent expense of $1,200. As with all the other journals, the total debits ($4,280 = $3,461 + $819) should equal the total credits ($4,280 = $21 + $4,259).

Posting from the Cash Payments Journal

Posting from the cash payments journal is similar to posting from the cash receipts journal. Individual supplier amounts are posted daily, and column totals and Other Accounts at the end of the month. (Exhibit 7-11, Panel B, illustrates the posting).

Amounts in the Other Accounts column are posted individually (for example, Rent Expense—debit $1,200). When each Other Account is posted to the general ledger, the account number is printed in the Post. Ref. column. The letter x below the column signifies that the total is *not* posted.

Balancing the Ledgers

To review accounts payable, companies list individual supplier balances in the accounts payable ledger. The general ledger and subsidiary totals should agree.

EXHIBIT 7-11   Cash Payments Journal (Panel A) and Posting to the Ledgers (Panel B)

PANEL A—Cash Payments Journal:

Cash Payments Journal							Page 6
				Debits		**Credits**	
Date 2008	**Ck. No.**	**Account Debited**	**Post. Ref.**	**Other Accounts**	**Accounts Payable**	**Inventory**	**Cash**
Nov. 3	101	Rent Expense	541	1,200			1,200
8	102	Supplies	161	61			61
15	103	Hanes Textiles	✓		700	21	679
20	104	Pioneer Plastics	✓		119		119
26	105	Inventory	131	2,200			2,200
30		Totals		3,461	819	21	4,259
				(X)	(210)	(131)	(101)

Total is not posted.

Totals can be posted at the end of the month.

Individual accounts payable are posted daily.

PANEL B—Posting to the Ledgers:

Individual accounts can be posted at the end of the month.

Accounts Payable Subsidiary Ledger

Advanced Printing

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 12	P.8		236	236

City Office Supply

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 9	P.8		440	440
19	P.8		103	543

Hanes Textiles

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 2	P.8		700	700
13	P.8		451	1,151
15	CP. 6	700		451

O'Leary Furniture Co.

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 23	P.8		627	627

Pioneer Plastics

Date	Jrnl. Ref.	Debit	Credit	Balance
Nov. 5	P.8		319	319
20	CP. 6	119		200

General Ledger

Cash   No. 101

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	CR. 5	6,134		6,134
30	CP. 6		4,259	1,875

Inventory   No. 131

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	P.8	1,706		1,706
26	CP. 6	2,200		3,906
30	CP. 6		21	3,885

Supplies   No. 161

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 30	P.8	103		103
8	CP. 6	61		164

Accounts Payable   No. 210

Date	Jrnl. Ref.	Debit	Credit	Credit Balance
Nov. 30	P.8		2,876	2,876
30	CP. 6	819		2,057

Rent Expense   No. 541

Date	Jrnl. Ref.	Debit	Credit	Debit Balance
Nov. 3	CP. 6	1,200		1,200

GENERAL LEDGER

Accounts Payable credit balance.........................	$2,057

SUBSIDIARY LEDGER: ACCOUNTS PAYABLE

Supplier	Balance
Advanced Printing	$ 236
City Office Supply	543
Hanes Textiles	451
O'Leary Furniture	627
Pioneer Plastics...	200
Total accounts payable	$2,057

The Role of the General Journal

Special journals save time recording repetitive transactions. But some transactions don't fit a special journal. Examples include depreciation, the expiration of prepaid insurance, and the accrual of salary payable at the end of the period.

> All accounting systems need a general journal. The adjusting entries and the closing entries are recorded in the general journal, along with other nonroutine transactions.

Many companies use the general journal for sales returns and allowances and purchase returns and allowances. Let's turn now to sales returns and allowances. The related business document is called a *credit memo*.

The Credit Memo—Recording Sales Returns and Allowances

In Class Tip

• A *credit* memo signifies that an "**account**" needs to be *credited*. For a credit memo you'll always credit your **Account Receivable** from the customer.

As we've seen, customers sometimes return merchandise to the seller. And sellers sometimes grant allowances to customers because of product defects. The effect of sales returns and sales allowances is the same—they decrease net sales and accounts receivable. The document issued by the seller for a sales return is called a **credit memo** because the company gives the customer credit for the returned merchandise. When a company issues a credit memo, it debits Sales Returns and Allowances and credits Accounts Receivable.

On November 27, In Motion sold T-shirts to Clay Schmidt for $1,783 on account. Later, Schmidt discovered a defect and returned the inventory. In Motion then issued to Schmidt a credit memo like the one in Exhibit 7-12.

EXHIBIT 7-12   **Credit Memo Issued by In Motion**

Credit Memorandum   No. 27

In Motion   Date: December 1, 2006
305 Riverside Drive
New Orleans, LA 70112

Customer Name   Clay Schmidt
                 598 Canal Street, Apt. 296
                 New Orleans, LA 70116

Reason for Credit   Defective merchandise returned

Description	Amount
150 T-shirts	$1,783

To record the *sale return* and the receipt of the defective merchandise, In Motion would make these entries in the general journal:

General Journal   **Page 9**

Date	Accounts	Post Ref.	Debit	Credit
Dec. 1	Sales Returns and Allowances	430	1,783	
	Accounts Receivable—Clay Schmidt	115/✔		1,783
	Credit memo no. 27.			
Dec. 1	Inventory	131	431	
	Cost of Goods Sold	511		431
	Received defective goods from customer.			

Focus on the first entry. Sales Returns and Allowances is debited. After posting, its account number (430) is written in the posting reference column. The credit entry requires two postings: one to Accounts Receivable in the general ledger (account number 115) and the other to Clay Schmidt in the accounts receivable ledger, denoted by the check mark (✔).

The second entry records In Motion's receipt of the defective inventory from Schmidt. Now let's see how In Motion records its purchase return of these defective T-shirts to Hanes Textiles.

The Debit Memo—Recording Purchase Returns and Allowances

A purchase return occurs when a business returns goods to the seller. The purchaser receives a cash refund or replacement goods.

In Class Tip

• A *debit* memo means that an "**account**" needs to be *debited.* With a debit memo, you'll always debit your **Accounts Payable** to the supplier. You no longer owe this debt.

The purchaser may also send a document known as a **debit memo**. This document states that the buyer no longer owes for the goods. The buyer debits Accounts Payable and credits Inventory for the cost of the goods returned to the seller.

Many businesses record purchase returns in the general journal. In Motion would record its purchase return of defective T-shirts to Hanes Textiles as follows:

General Journal   Page 9

Date	Accounts	Post Ref.	Debit	Credit
Dec. 2	Accounts Payable—Hanes Textiles	210/✓	431	
	Inventory	131		431
	Debit memo no. 16			

Balancing the Ledgers

At the end of the period, after all postings, equality should exist as follows:

1. **General ledger:** Total debits = Total credits

2. **General ledger and Accounts Receivable subsidiary ledger:**

Balance of the Accounts Receivable control account	=	Sum of all the customer balances in the Accounts Receivable ledger

3. **General ledger and Accounts Payable subsidiary ledger:**

Balance of the Accounts Payable control account	=	Sum of all the supplier balances in the Accounts Payable ledger

This process is called *balancing the ledgers.* It maintains the accuracy of the accounting records.

Blending Computers and Special Journals

Computerizing special journals requires no drastic change. Systems designers can create a special screen for each accounting module—credit sales, cash receipts, purchases on account, and cash payments.

The special screen for credit sales would ask the computer operator to enter the following information:

- Date
- Customer number
- Customer name
- Invoice number
- Dollar amount of the sale
- Cost of the goods sold

These data can generate the sales journal and the monthly statements for customers.

The Decision Guidelines feature focuses on major decisions accountants make as they use an information system.

Decision Guidelines

USING SPECIAL JOURNALS AND CONTROL ACCOUNTS

Let's continue with In Motion, your T-shirt business. Suppose it's not economical to computerize, so you set up a manual accounting system. How do you get started? The Decision Guidelines point you in the right direction.

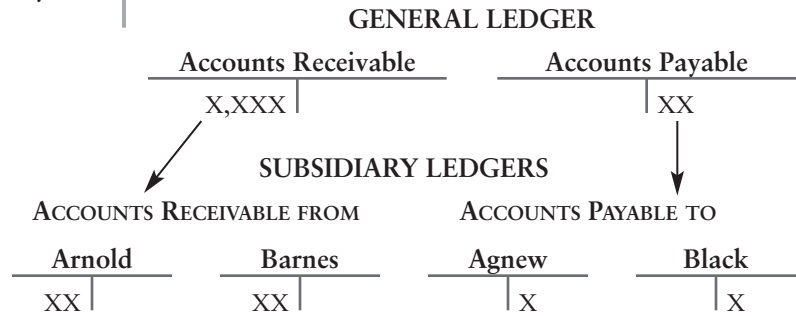| Decision	Guidelines

What are the main components of an accounting system?	Journals
	• General journal
	• Special journals
		Ledgers
		• General ledger
		• Subsidiary ledgers:
		  Accounts receivable
		  Accounts payable

Where to record

- Sales on account?
- Cash receipts?
- Purchases on account?
- Cash payments?
- All other transactions?

Journals

- Sales journal
- Cash receipts journal
- Purchases journal
- Cash payments journal
- General journal

How does the general ledger relate to the subsidiary ledgers?

GENERAL LEDGER

Accounts Receivable	Accounts Payable
X,XXX	XX

SUBSIDIARY LEDGERS

ACCOUNTS RECEIVABLE FROM

Arnold	Barnes
XX	XX

ACCOUNTS PAYABLE TO

Agnew	Black
X	X

When to post from the journals to the

- General ledger?
- Subsidiary ledgers?

—Monthly (or more often, if needed)
—Daily

How to achieve control over

- Accounts receivable?
- Accounts payable?

Balance the ledgers, as follows:

General Ledger		Subsidiary Ledger
Accounts receivable	=	Sum of individual *customer* accounts receivable
Accounts payable	=	Sum of individual *supplier* accounts payable

Summary Problem

Houlihan Company completed the following selected transactions during March:

Mar. 4	Received $500 for a cash sale to a customer (cost, $319).
6	Received $60 on account from Brady Lee. The full invoice amount was $65, but Lee paid within the discount period to gain the $5 discount.
9	Received $1,080 on a note receivable from Beverly Mann. This amount includes the $1,000 note receivable plus interest revenue.
15	Received $800 for a cash sale to a customer (cost, $522).
24	Borrowed $2,200 by signing a note payable to Interstate Bank.
27	Received $1,200 on account from Lance Albert. Collection was received after the discount period, as there was no discount.

Requirements

The general ledger showed the following balances at February 28: Cash, $1,117; Accounts Receivable, $2,790; Note Receivable—Beverly Mann, $1,000; and Inventory, $1,819. The accounts receivable subsidiary ledger at February 28 contained debit balances as follows: Lance Albert, $1,840; Melinda Fultz, $885; Brady Lee, $65.

1. Record the transactions in the cash receipts journal, page 7.

2. Compute column totals at March 31. Show that total debits equal total credits in the cash receipts journal.

3. Post to the general ledger and the accounts receivable subsidiary ledger. Use complete posting references, including the following account numbers: Cash, 11; Accounts Receivable, 12; Note Receivable—Beverly Mann, 13; Inventory, 14; Note Payable—Interstate Bank, 22; Sales Revenue, 41; Sales Discounts, 42; Interest Revenue, 46; and Cost of Goods Sold, 51. Insert a check mark (✔) in the posting reference column for each February 28 account balance.

4. Balance the Accounts Receivable subsidiary ledger with the Accounts Receivable account in the general ledger.

Solution

Requirements 1 and 2

CASH RECEIPTS JOURNAL   PAGE 7

| | Debits | | Credits | | Other Accounts | | | Cost of Goods Sold Debit Inventory Credit |
Date	Cash	Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	
Mar. 4	500			500				319
6	60	5	65		Brady Lee	✓		
9	1,080				Note Receivable—Beverly Mann	13	1,000	
					Interest Revenue	46	80	
15	800			800				522
24	2,200				Note Payable—Interstate Bank	22	2,200	
27	1,200		1,200		Lance Albert	✓		
31	5,840	5	1,265	1,300	Total		3,280	841
	(11)	(42)	(12)	(41)			(X)	(51/14)

Total Dr. = 5,845   Total Cr. = 5,845

Requirement 3

ACCOUNTS RECEIVABLE LEDGER

Lance Albert

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			1,840
Mar. 27	CR.7		1,200	640

Melinda Fultz

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			885

Brady Lee

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			65
Mar. 6	CR.7		65	—

GENERAL LEDGER

Cash   No. 11

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			1,117
Mar. 31	CR.7	5,840		6,957

Accounts Receivable   No. 12

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			2,790
Mar. 31	CR.7		1,265	1,525

Note Receivable—Beverly Mann   No. 13

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			1,000
Mar. 9	CR.7		1,000	—

Inventory   No. 14

Date	Jrnl. Ref.	Debit	Credit	Balance
Feb. 28	✔			1,819
Mar. 31	CR.7		841	978

Note Payable—Interstate Bank   No. 22

Date	Jrnl. Ref.	Debit	Credit	Balance
Mar. 24	CR.7		2,200	2,200

Sales Revenue   No. 41

Date	Jrnl. Ref.	Debit	Credit	Balance
Mar. 31	CR.7		1,300	1,300

Sales Discounts   No. 42

Date	Jrnl. Ref.	Debit	Credit	Balance
Mar. 31	CR.7	5		5

Interest Revenue   No. 46

Date	Jrnl. Ref.	Debit	Credit	Balance
Mar. 9	CR.7		80	80

Cost of Goods Sold   No. 51

Date	Jrnl. Ref.	Debit	Credit	Balance
Mar. 31	CR.7	841		841

Requirement 4

General Ledger

Accounts Receivable debit balance .... $1,525 ◄

Accounts Receivable Subsidiary Ledger

Customer	Balance
Lance Albert	$ 640
Melinda Fultz	885
Total accounts receivable	$1,525 ◄

Review *Accounting Information Systems*

Accounting Vocabulary

Batch Processing
Computerized accounting for similar transactions in a group or batch.

Cash Disbursements Journal
Special journal used to record cash payments by check. Also called the **check register** or **cash payments journal**.

Cash Payments Journal
Special journal used to record cash payments by check. Also called the **check register** or **cash disbursements journal**.

Cash Receipts Journal
Special journal used to record cash receipts.

Check Register
Special journal used to record cash payments by check. Also called the **cash disbursements journal** or **cash payments journal**.

Control Account
An account whose balance equals the sum of the balances in a group of related accounts in a subsidiary ledger.

Credit Memo
A document issued by a seller to credit a customer account for returned merchandise.

Data Warehouse
A very large database holding data for a number of years and used for analysis rather than for transaction processing.

Debit Memo
A document issued by a buyer when returning merchandise. The memo informs the seller that the buyer no longer owes the seller for the amount of the returned purchases.

Enterprise Resource Planning (ERP)
Software that can integrate all of a company's worldwide functions, departments, and data into a single system.

General Journal
Journal used to record all transactions that do not fit one of the special journals.

General Ledger
Ledger of accounts that are reported in the financial statements.

Hardware
Electronic equipment that includes computers, disk drives, monitors, printers, and the network that connects them.

Menu
A list of options for choosing computer functions.

Network
The system of electronic linkages that allows different computers to share the same information.

Online Processing
Computerized processing of related functions, such as the recording and posting of transactions on a continuous basis.

Purchases Journal
Special journal used to record all purchases of inventory, supplies, and other assets on account.

Sales Journal
Special journal used to record credit sales.

Server
The main computer in a network where the program and data are stored.

Software
Set of programs or instructions that drives the computer to perform the work desired.

Special Journal
An accounting journal designed to record one specific type of transaction.

Spreadsheet
A computer program that links data by means of formulas and functions; an electronic work sheet.

Subsidiary Ledger
Record of accounts that provides supporting details on individual balances, the total of which appears in a general ledger account.

Quick Check

1. The outputs of a computerized accounting system are called

a. Reports

b. Software

c. Processing

d. Trial balance

2. Account number 411 is most likely a (an)

a. Asset

b. Liability

c. Owner equity

d. Revenue

e. Expense

3. The Excel formula to compute net income's percentage of sales in Exhibit 7-5, page 359, is

a. =B4*B2

b. =B4/B2

c. =B2−B3

d. =B4+B3

4. Centex Sound Systems purchased inventory costing $8,000 from Sony on account. Where should Centex record this transaction, and what account is credited?

a. Cash payments journal; credit Cash

b. Sales journal; credit Sales Revenue

c. Purchases journal; credit Accounts Payable

d. General journal; credit Inventory

5. Examine In Motion's sales journal in Exhibit 7-8, page 362. Based on these data, how much gross profit did In Motion earn during November?

a. $1,814

b. $2,505

c. $4,319

d. Cannot tell from the data given

6. Every transaction recorded in the cash receipts journal includes a

a. Credit to Cash

b. Debit to Accounts Receivable

c. Debit to Sales Discounts

d. Debit to Cash

7. The purchases journal is used to record all

a. Purchases of assets

b. Payments of purchases on account

c. Purchases of inventory

d. Purchases on account

8. The individual accounts in the accounts receivable subsidiary ledger identify
   a. Customers
   b. Creditors
   c. Amounts to be paid
   d. Suppliers

9. Which of the following is *not* a general ledger account?
   a. Sales Discounts
   b. Accounts Receivable
   c. Jackson Company
   d. Supplies Expense

10. A debit memo is a (an)
    a. Report of all the debits to the Cash account
    b. Document for a purchase return
    c. Document for a sales return
    d. Entry to the Accounts Receivable account

Answers are given after Apply Your Knowledge (p. 402).

Assess Your Progress

Short Exercises

Features of an effective information system

1

S7-1 In Motion, your T-shirt business, is growing fast, and you need a better accounting system. Consider the features of an effective system, as discussed on pages 353–355. Which features are most important? Why? Which feature must you consider if your financial resources are limited? (pp. 353–355)

Components of a computerized accounting system

1

S7-2 Match each component of a computerized accounting system with its meaning. (p. 355)

Meaning	Component
_____ Electronic linkages that allow different computers to share the same information	A. Server
_____ Electronic equipment	B. Software
_____ Programs that drive a computer	C. Hardware
_____ Main computer in a networked system	D. Network

Accounting system vocabulary

1

S7-3 Complete the crossword puzzle that follows. (pp. 353–356)

Down:
1. Managers need_____over operations in order to authorize transactions and safeguard assets
3. Programs that drive a computer
4. Electronic computer equipment
5. A_____ible information system accommodates changes as the organization evolves
6. The opposite of debits

Across:
2. Electronic linkage that allows different computers to share the same information
3. Main computer in a networked system
7. Cost-_____relationship must be favorable

Assigning account numbers

2

S7-4 Assign account numbers (from the list that follows) to the accounts of Clarke Logistics. (p. 356)

Jan Marks, Withdrawals   Inventory

Service Revenue   Accounts Payable

Depreciation Expense   Jan Marks, Capital

Numbers from which to choose:

151	301
191	311
201	411
281	531

Using a spreadsheet

3

S7-5 The spreadsheet screen in Exhibit 7-5, page 359, is your income state-
ment. Suppose you are developing your financial plan for the coming
year. Revenues should increase by 8% and expenses by 6%. Write the
formulas in cells C2 through C4 to compute expected revenues, expenses,
and net income for the coming year. (pp. 358–360)

Using the journals

4 5

S7-6 Use the following abbreviations to indicate the journal in which you
would record transactions a through n. (pp. 361–371)

J = General journal

S = Sales journal

CR = Cash receipts journal

P = Purchases journal

CP = Cash payments journal

Transactions:

_____ **a.** Cash purchase of inventory

_____ **b.** Collection of dividend revenue earned on an investment

_____ **c.** Prepayment of insurance

_____ **d.** Borrowing money on a long-term note payable

_____ **e.** Purchase of equipment on account

_____ **f.** Cost of goods sold along with a credit sale

_____ **g.** Cash sale of inventory

_____ **h.** Payment of rent

_____ **i.** Depreciation of computer equipment

_____ **j.** Purchase of inventory on account

_____ **k.** Collection of accounts receivable

_____ **l.** Expiration of prepaid insurance

_____ **m.** Sale on account

_____ **n.** Payment on account

Using the sales journal and
the related ledgers

4

S7-7 Use the sales journal and the related ledger accounts in Exhibit 7-8,
page 362, to answer these questions about In Motion, your T-shirt busi-
ness. (pp. 361–362)

1. How much inventory did In Motion have on hand at the end of
November? Where can you get this information? Be specific.

2. What amount did In Motion post to the Sales Revenue account?
When did In Motion post to the Sales Revenue account? Assume a
manual accounting system.

3. After these transactions, how much does Susan Levy owe In Motion?
Where do you obtain this information? Be specific.

4. If there were no discounts, how much would In Motion hope to
collect from all its customers? Where is this amount stored in a sin-
gle figure? Be specific.

Using accounts receivable records

4

S7-8 1. In Motion, your T-shirt business, needs good accounts receivable records to ensure collection from customers. What is the name of the detailed record of amounts collectible from individual customers? (pp. 361–362)

2. A key control feature of your accounting system lies in the agreement between the detailed customer receivable records and the summary total in the general ledger. Use the data in Exhibit 7-8, page 362, to prove that In Motion's accounts receivable records are accurate. (pp. 361–362, 363–364)

Using cash receipts data

4

S7-9 The cash receipts journal of In Motion appears in Exhibit 7-9, page 365, along with the company's various ledger accounts. Use the data in Exhibit 7-9 to answer the following questions about your cash receipts.

1. How much were total cash receipts during November? (p. 365)

2. How much cash did In Motion collect on account from customers? How much in total discounts did customers earn by paying quickly? How much did your accounts receivable decrease because of collections from customers during November? (p. 365)

3. How much were cash sales during November? (p. 365)

Using the purchases journal

5

S7-10 Use In Motion's purchases journal (Exhibit 7-10, page 367) to address these questions about your purchases on account.

1. How much were In Motion's purchases of inventory on account during November? (p. 367)

2. Suppose it is December 1 and you wish to pay the full amount that you owe on account. Examine only the purchases journal (page 367). Then make a general journal entry to record payment of the correct amount on December 1. Include an explanation. (pp. 367, 70–76)

Using the purchases journal and the cash payments journal

5

S7-11 Refer to In Motion's purchases journal (Exhibit 7-10, page 367) and cash payments journal (Exhibit 7-11, page 369). Answer the following questions about your business.

1. How much in total credit purchases of inventory, supplies, equipment, and furniture did you make during November? (p. 367)

2. How much of the accounts payable did you pay off during November? (pp. 368–369)

3. At November 30, after all purchases and all cash payments, how much does In Motion owe Hanes Textiles? How much in total does In Motion owe on account? (pp. 368–369)

Using all the journals

4 **5**

S7-12 Answer the following questions about the November transactions of In Motion, your T-shirt business. You will need to refer to Exhibits 7-8 through 7-11, which begin on page 362.

1. How much cash does In Motion have on hand at November 30? (pp. 368–369)

2. Compute In Motion's gross sales revenue and net sales revenue for November. (p. 365)

3. How did In Motion purchase furniture—for cash or on account? Indicate the basis for your answer. (pp. 367, 368–369)

4. From whom did In Motion purchase supplies on account? How much in total does In Motion owe this company on November 30? (pp. 367, 368–369)

Exercises

Setting up a chart of accounts

2

E7-13 Use account numbers 101 through 106, 201, 221, 301, 321, 401, 501 and 521 to correspond to the following selected accounts from the general ledger of Mobile Technology Company. List the accounts and their account numbers in proper order, starting with the most liquid current asset. (p. 356)

Jerry Mobile, capital	Depreciation expense	Accounts receivable
Cost of goods sold	Cash	Note payable, long-term
Accounts payable	Jerry Mobile, withdrawals	Computer equipment
Inventory	Supplies	
Sales revenue	Accumulated depreciation	

Using a trial balance

2

E7-14 The accounts of Lake Onondaga Steakhouse show some of these amounts before closing:

Total assets	$?	Larry Nolan, capital	$ 8,600
Current assets	18,100	Larry Nolan, withdrawals	2,000
Plant assets	63,400	Total revenues	40,000
Total liabilities	?	Total expenses	21,000

Compute the missing amounts. You must also compute ending owner's equity. (p. 203)

Using a spreadsheet to compute depreciation

3

E7-15 Equipment listed on a spreadsheet has a cost of $60,000; this amount is located in cell B9. The years of the asset's useful life (20) are found in cell C8. Write the spreadsheet formula to express annual depreciation expense for the equipment. How much is annual depreciation? (pp. 358–360)

Computing financial statement amounts with a spreadsheet

3

E7-16 The following items appear in the cells of a Witt Furniture Store spreadsheet:

Item	Cell
Total assets	B22
Current assets	B8
Fixed assets	B11
Total liabilities	C11
Current liabilities	C6
Long-term liabilities	C10

Write the spreadsheet formula to calculate Witt's (pp. 358–360)

a. Current ratio (p. 210)

b. Total owner's equity (p. 11)

c. Debt ratio (p. 210)

Using the sales and cash
receipts journals

4

E7-17 The sales and cash receipts journals of Kincaid Office Products include the following entries:

SALES JOURNAL

Date	Account Debited	Post. Ref.	Accounts Receivable Dr. Sales Revenue Cr.	Cost of Goods Sold Dr. Inventory Cr.
May 7	L. Ewald	✓	110	76
10	T. Ross	✓	60	29
10	E. Lovell	✓	60	35
12	B. Goebel	✓	120	60
31	Total		350	200

CASH RECEIPTS JOURNAL

	Debits			Credits				Cost of Goods Sold Dr. Inventory Cr.
						Other Accounts		
Date	Cash	Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	
May 16					L. Ewald	✓		
19					E. Lovell	✓		
24	300			300				190
30					T. Ross	✓		

Complete the cash receipts journal for those transactions indicated. There are no sales discounts. Also, total the journal and show that total debits equal total credits. (pp. 361–362, 365)

Analyzing postings from the
cash receipts journal

4

E7-18 The cash receipts journal of Sironia Plastics follows.

CASH RECEIPTS JOURNAL   **PAGE 7**

	Debits				Credits		
						Other Accounts	
Date	Cash	Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount
Jan. 2	790	20	810		Annan Corp.	(e)	
9	490		490		Kamm, Inc.	(f)	
19	4,480				Note Receivable	(g)	4,000
					Interest Revenue	(h)	480
30	310	10	320		J. T. Franz	(i)	
31	4,230			4,230			
31	10,300	30	1,620	4,230	Totals		4,480
	(a)	(b)	(c)	(d)			(j)

continued...

Sironia's general ledger includes the following selected accounts, along with their account numbers:

Number	Account	Number	Account
110	Cash	510	Sales revenue
120	Accounts receivable	512	Sales discounts
125	Note receivable	515	Sales returns
140	Land	520	Interest revenue

Requirements
Indicate whether each posting reference (a) through (j) should be a (p. 365)
- Check mark (✔) for a posting to a customer account in the accounts receivable subsidiary ledger.
- Account number for a posting to an account in the general ledger. If so, give the account number.
- Letter (x) for an amount not posted.

Identifying transactions from postings to the accounts receivable ledger

4

E7-19 A customer account in the accounts receivable subsidiary ledger of Lyndon Olson Company follows.

JOHN WATERS

Date		Jrnl. Ref.	Dr.	Cr.	Balance Dr.	Balance Cr.
Nov. 1	. . . .				400	
9	. . . .	S.5	1,180		1,580	
18	. . . .	J.8		190	1,390	
30	. . . .	CR.9		700	690	

Requirement
Describe the three posted transactions. (pp. 361–362, 365)

Recording transactions in the general journal and in the purchases journal

5

E7-20 During April, Shannon Donut Distributors completed these *credit purchase* transactions:

April 5	Purchased supplies, $400, from Sudan, Inc.
11	Purchased inventory, $1,200, from Greenbrier Corp. Shannon uses a perpetual inventory system.
19	Purchased equipment, $4,300, from Saturn Co.
22	Purchased inventory, $2,210, from Milan, Inc.

Record these transactions first in the general journal—with explanations—and then in the purchases journal. Omit credit terms and posting references. Which procedure for recording transactions is quicker? Why? (pp. 315–317, 367)

Posting from the purchases
journal; balancing the ledgers

5

E7-21 The purchases journal of TransEastern Publishing Company follows.

PURCHASES JOURNAL   PAGE 7

Date	Account Credited	Terms	Post. Ref.	Account Payable Cr.	Inventory Dr.	Supplies Dr.	Other Accounts Dr. Acct. Title	Other Accounts Dr. Post. Ref.	Other Accounts Dr. Amount Dr.
Sep. 2	Lance's Tech	n/30		800	800				
5	Jupiter Supply	n/30		170		170			
13	Lancer Tech	2/10 n/30		1,400	1,400				
26	Faver Equipment	n/30		900			Equipment		900
30	Totals			3,270	2,200	170			900

Requirements

1. Open four-column ledger accounts for Inventory, Supplies, Equipment, and Accounts Payable. Post to these accounts from the purchases journal. Use dates and posting references in the accounts. (pp. 80, 367)

2. Open accounts in the accounts payable subsidiary ledger for Faver Equipment, Lancer Tech, and Jupiter Supply. Post from the purchases journal. Use dates and journal references in the ledger accounts. (p. 367)

3. Balance the Accounts Payable control account in the general ledger with the total of the balances in the accounts payable subsidiary ledger. (p. 370)

Using the cash payments
journal

5

E7-22 During August, Berryhill Stamp Company had the following transactions:

Aug. 1	Paid $490 on account to Rabin Associates, net of a $10 discount for an earlier purchase of inventory.
5	Purchased inventory for cash, $1,100.
9	Paid $300 for supplies.
16	Paid $4,060 on account to LaGrange Company; there was no discount.
21	Purchased furniture for cash, $900.
26	Paid $3,900 on account to Hallmark for an earlier purchase of inventory. The discount was $100.
30	Made a semiannual interest payment of $800 on a long-term note payable. The entire payment was for interest.

Requirements

1. Prepare a cash payments journal similar to the one illustrated in this chapter. Omit the check number (Ck. No.) and posting reference (Post. Ref.) columns. (p. 369)

2. Record the transactions in the cash payments journal. (p. 369)

3. Total the amount columns of the journal. Determine that total debits equal total credits. (p. 369)

Using business documents
to record transactions

4

E7-23 The following documents describe two business transactions.

Invoice		
Date:	Dec. 12, 2007	
Sold to:	Jerry Stevens Bridgestone	
Sold by:	Bridgestone Tire Co.	
Terms:	2/10 n/30	

Items Purchased	Tires	
Quantity	**Price**	**Total**
8	$95	$ 760
4	70	280
5	60	300
Total		**$1,340**

Debit Memo		
Date:	Dec. 18, 2007	
Sent to:	Bridgestone Tire.Co.	
Sent by:	Jerry Stevens Bridgestone	

Items Returned	Tires	
Quantity	**Price**	**Total**
2	$95	$190
1	70	70
Total		**$260**

Reason: Damaged in shipment

Requirements

Use the general journal to record these transactions and Jerry Stevens' cash payment on December 19. Record the transactions first on the books of Jerry Stevens, Bridgestone and, second, on the books of Bridgestone Tire Company, which manufactures auto tires. Both Stevens and Bridgestone use a perpetual inventory system as illustrated in Chapter 5. Bridgestone's cost of the tires sold to Stevens was $690. Bridgestone's cost of the returned merchandise was $140.

Round amounts to the nearest dollar. Explanations are not required. Set up your answer in the following format. (pp. 315–317, 371)

Date	Stevens Journal Entries	Bridgestone Journal Entries

Using the special journals

4 **5**

E7-24 In Motion's special journals in Exhibits 7-8 through 7-11 (pages 362–369) provide much of the data needed to prepare the financial statements. In Motion uses the *perpetual* inventory system. As the owner, you need to know the business's gross profit for November. Compute the gross profit. (pp. 365, 320–321)

Problems (Group A)

Using a spreadsheet to
prepare an income
statement

3

P7-25A The following spreadsheet shows the income statement of Bates Performance Auto:

	Column	
Row Number	**A**	**B**
3	Revenues:	
4	Service revenue ⟶	number
5	Rent revenue ⟶	number
6		
7	Total revenue ⟶	
8		
9	Expenses:	
10	Salary expense ⟶	number
11	Supplies expense ⟶	number
12	Rent expense ⟶	number
13	Depreciation expense ⟶	number
14		
15	Total expenses ⟶	
16		
17	Net income ⟶	
18		

Requirement

Write the appropriate formula in each cell that will need a formula. Choose from these symbols: (pp. 358–360)

+ add

– subtract

= SUM (beginning cell:ending cell)

* multiply

/ divide

Using the sales, cash
receipts, and general
journals

4

P7-26A The general ledger of Barton Springs Glass Company includes the following selected accounts, along with their account numbers:

Cash	11	Equipment	18
Accounts Receivable	12	Sales Revenue	41
Inventory	13	Sales Discounts	42
Notes Receivable	15	Sales Returns and Allowances	43
Supplies	16	Cost of Goods Sold	51

All credit sales are on Barton Springs' standard terms of 2/10 n/30. Sales and cash receipts transactions in July were as follows:

July 2	Sold inventory on credit to Intelysis, Inc., $1,750. Barton Springs' cost of these goods was $600.
3	As an accommodation to a competitor, sold supplies at cost, $85, receiving cash.
7	Cash sales for the week totaled $1,890 (cost, $1,640).
9	Sold merchandise on account to A. L. Prince, $7,320 (cost, $5,110).
10	Sold land that cost $10,000 for cash of the same amount.
11	Sold goods on account to Sloan Electric, $5,100 (cost, $3,520).
12	Received cash from Intelysis in full settlement of its account receivable from July 2.
14	Cash sales for the week were $2,106 (cost, $1,530).
15	Sold inventory on credit to the partnership of Wilkie & Blinn, $3,650 (cost, $2,260).
18	Received inventory sold on July 9 to A. L. Prince for $600. The goods shipped were unsatisfactory. These goods cost Barton Springs $440.
20	Sold merchandise on account to Sloan Electric, $620 (cost, $450).
21	Cash sales for the week were $990 (cost, $690).
22	Received $4,000 cash from A. L. Prince in partial settlement of his account receivable.
25	Received cash from Wilkie & Blinn for its account receivable from July 15.
25	Sold goods on account to Olsen Co., $1,520 (cost, $1,050).
27	Collected $5,125 on a note receivable. There is no interest.
28	Cash sales for the week totaled $3,774 (cost, $2,460).
29	Sold inventory on account to R. O. Bankston, $240 (cost, $170).
30	Received goods sold on July 25 to Olsen Co. for $40. The cost of these goods was $10.
31	Received $2,720 cash on account from A. L. Prince.

Requirements

1. Use the appropriate journal to record the preceding transactions in a sales journal (omit the Invoice No. column), a cash receipts journal, and a general journal. Barton Springs Glass Company records sales returns and allowances in the general journal. (pp. 361–362, 365, 371)

2. Total each column of the sales journal and the cash receipts journal. Show that total debits equal total credits. (p. 365)

3. Show how postings would be made by writing the account numbers and check marks in the appropriate places in the journals. (pp. 361–362, 365, 371).

Correcting errors in the cash
receipts journal

4

P7-27A The following cash receipts journal of Bernina Sewing Machines con-
tains 5 entries. All 5 entries are for legitimate cash receipt transactions,
but the journal has some errors from recording the transactions incor-
rectly. In fact, only 1 entry is correct, and each of the other 4 entries con-
tains 1 error. Ignore posting references.

CASH RECEIPTS JOURNAL

	Debits				Credits			
					Other Accounts			Cost of Goods
Date	Cash	Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	Sold Debit Inventory Credit
Jan. 4		1,200		1,200				500
7	430	20			Paul Dalton		450	
13	4,100				Note Receivable		4,000	
					Interest Revenue		100	
20				300				150
30		700	700		Jaclyn Webb			
31	4,530	1,920	700	1,500	Totals		4,550	650

Total Dr. = $6,450   Total Cr. = $6,750

Requirements

1. Identify the correct entry. (p. 365)

2. Identify the error in each of the other 4 entries. Cost of Goods Sold
   and Inventory are correct. (p. 365)

3. Prepare a corrected cash receipts journal using the following format.
   All column totals are correct in the cash receipts journal that fol-
   lows. (p. 365)

CASH RECEIPTS JOURNAL

	Debits				Credits			
					Other Accounts			Cost of Goods
Date	Cash	Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	Sold Debit Inventory Credit
Jan. 4								500
7					Paul Dalton			
13	4,100				Note Receivable		4,000	
					Interest Revenue		100	
20								150
30					Jaclyn Webb			
31	6,730	20	1,150	1,500	Totals		4,100	650

Total Dr. = $6,750   Total Cr. = $6,750

Using the purchases, cash payments, and general journals

5

P7-28A The general ledger of Crystal Lake Golf Shop includes these accounts, along with their account numbers:

Cash	111	Equipment	187
Inventory	131	Accounts Payable	211
Prepaid Insurance	161	Rent Expense	564
Supplies	171	Utilities Expense	583

Transactions in December that affected purchases and cash payments follow.

Dec 2   Purchased inventory on credit from Titleist, $4,000. Terms were 2/10 n/30.

3   Paid monthly rent, debiting Rent Expense for $2,000.

5   Purchased supplies on credit terms of 2/10 n/30 from Ross Supply, $450.

8   Paid electricity utility bill, $580.

9   Purchased equipment on account from A-1 Equipment, $6,100. Payment terms were net 30.

10   Returned the equipment to A-1 Equipment. It was damaged.

11   Paid Titleist the amount owed on the purchase of December 2.

12   Purchased inventory on account from Callaway Golf, $4,400. Terms were 3/10 n/30.

13   Purchased inventory for cash, $650.

14   Paid a semiannual insurance premium, debiting Prepaid Insurance, $1,200.

16   Paid our account payable to Ross Supply, from December 5.

18   Paid gas and water utility bills, $190.

21   Purchased inventory on credit terms of 1/10 n/45 from Dunlop, Inc., $3,900.

21   Paid account payable to Callaway Golf from December 12.

22   Purchased supplies on account from Office Sales, Inc., $100. Terms were net 30.

26   Returned to Dunlop, Inc., $1,200 of the inventory purchased on December 21.

31   Paid Dunlop, Inc., the net amount owed from December 21 less the return on December 26.

Requirements

1. Crystal Lake Golf Shop records purchase returns in the general journal. Use the appropriate journal to record the transactions in a purchase journal, a cash payments journal (omit the Check No. column), and a general journal. (pp. 367, 368–369, 371)

2. Total each column of the special journals. Show that total debits equal total credits in each special journal. (pp. 367, 368–369)

3. Show how postings would be made from the journals by writing the account numbers and check marks in the appropriate places in the journals. (pp. 367, 368–369, 371)

Using all the journals, posting,
and balancing the ledgers

4 **5**

P7-29A Crestview Computer Security uses the perpetual inventory system and makes all credit sales on terms of 2/10 n/30. Crestview completed the following transactions during May:

May 2	Issued invoice no. 913 for sale on account to K. D. Forbes, $2,000. Crestview's cost of this inventory was $900.
3	Purchased inventory on credit terms of 3/10 n/60 from Chicosky Co., $2,467.
5	Sold inventory for cash, $1,077 (cost, $480).
5	Issued check no. 532 to purchase furniture for cash, $2,185.
8	Collected interest revenue of $1,775.
9	Issued invoice no. 914 for sale on account to Bell Co., $5,550 (cost, $2,310).
10	Purchased inventory for cash, $1,143, issuing check no. 533.
12	Received cash from K. D. Forbes in full settlement of her account receivable from the sale on May 2.
13	Issued check no. 534 to pay Chicosky Co. the net amount owed from May 3. Round to the nearest dollar.
13	Purchased supplies on account from Manley, Inc., $441. Terms were net end-of-month.
15	Sold inventory on account to M. O. Brown, issuing invoice no. 915 for $665 (cost, $240).
17	Issued credit memo to M. O. Brown for $665 for merchandise returned to us by Brown. Also accounted for receipt of the inventory at cost.
18	Issued invoice no. 916 for credit sale to K. D. Forbes, $357 (cost, $127).
19	Received $5,439 from Bell Co. in full settlement of its account receivable from May 9. Bell earned a discount by paying early.
20	Purchased inventory on credit terms of net 30 from Sims Distributing, $2,047.
22	Purchased furniture on credit terms of 3/10 n/60 from Chicosky Co., $645.
22	Issued check no. 535 to pay for insurance coverage, debiting Prepaid Insurance for $1,000.
24	Sold supplies to an employee for cash of $54, which was Crestview's cost.
25	Issued check no. 536 to pay utilities, $453.
28	Purchased inventory on credit terms of 2/10 n/30 from Manley, Inc., $675.
29	Returned damaged inventory to Manley, Inc., issuing a debit memo for $675.
29	Sold goods on account to Bell Co., issuing invoice no. 917 for $2,900 (cost, $800).
30	Issued check no. 537 to pay Manley, Inc., in full on account from May 13.

May 31	Received cash in full from K. D. Forbes on credit sale of May 18. There was no discount.
31	Issued check no. 538 to pay monthly salaries of $1,950.

Requirements

1. Open the following four-column general ledger accounts using the Crestview Computer Security account numbers as follows: (pp. 361–369)

Cash	111	Sales Revenue	411
Accounts Receivable	112	Sales Discounts	412
Supplies	116	Sales Returns and Allowances	413
Prepaid Insurance	117	Interest Revenue	419
Inventory	118	Cost of Goods Sold	511
Furniture	151	Salary Expense	531
Accounts Payable	211	Utilities Expense	541

2. Open these accounts in the subsidiary ledgers: Accounts receivable ledger—Bell Co., M. O. Brown, and K. D. Forbes. Accounts payable ledger—Chicosky Co.; Manley, Inc.; and Sims Distributing. (pp. 361, 367)

3. Enter the transactions in a sales journal (page 7), a cash receipts journal (page 5), a purchases journal (page 10), a cash payments journal (page 8), and a general journal (page 6), as appropriate. (pp. 361, 365, 367, 368–369, 371)

4. Post daily to the accounts receivable ledger and to the accounts payable ledger. On May 31, post to the general ledger. (pp. 361, 365, 367, 368–369, 371)

5. Total each column of the special journals. Show that total debits equal total credits in each special journal. (pp. 361, 365, 367, 368–369)

6. Balance the total of the customer balances in the accounts receivable ledger against Accounts Receivable in the general ledger. Do the same for the accounts payable ledger and Accounts Payable in the general ledger. (pp. 364, 366, 370)

Problems (Group B)

Using a spreadsheet to prepare a balance sheet

3

P7-30B The spreadsheet on the next page shows the assets of the Pandera Pizzeria balance sheet.

Requirement

Write the appropriate formula in each cell that will need a formula. Choose from these symbols (pp. 358–360):

+ add	* multiply
– subtract	/ divide

= SUM (beginning cell:ending cell)

	Column	
Row Number	A	B
3	Assets:	
4	Current assets:	
5	Cash ——————————————➤	number
6	Receivables ————————————➤	number
7	Inventory————————————➤	number
8		
9	Total current assets ———————➤	
10		
11	Equipment ————————————➤	number
12	Accumulated depreciation————————➤	number
13		
14	Equipment, net ————————➤	
15		
16	Total assets ————————————➤	
17		

Using the sales, cash receipts, and general journals

4

P7-31B The general ledger of Suds Soap Company includes the following selected accounts, along with their account numbers:

Cash	111	Land	142
Accounts Receivable	112	Sales Revenue	411
Notes Receivable	115	Sales Discounts	412
Inventory	131	Sales Returns and Allowances	413
Equipment	141	Cost of Goods Sold	511

All credit sales are on Suds' standard terms of 2/10 n/30. Sales and cash receipts transactions in November were as follows:

Nov. 2	Sold inventory on credit to Grant Thornton, $800. Suds' cost of these goods was $310.
6	As an accommodation to another company, sold new equipment for its cost of $770, receiving cash for this amount.
6	Cash sales for the week totaled $2,100 (cost, $1,360).
8	Sold goods to McNair Co. on account, $2,830 (cost, $1,780).
9	Sold land that cost $22,000 for cash of $22,000.

continued. . .

Nov. 11 Sold goods on account to Nickerson Supply, $1,500 (cost, $800).

11 Received cash from Grant Thornton in full settlement of his account receivable from November 2.

13 Cash sales for the week were $1,900 (cost, $1,200).

15 Sold inventory on credit to Montez and Montez, $900 (cost, $500).

18 Received inventory from McNair Co. as a sales return, $120. The goods we shipped were unsatisfactory. These goods cost us $70.

19 Sold inventory to Nickerson supply on account, $3,900 (cost, $2,610).

20 Cash sales for the week were $2,330 (cost, $1,570).

21 Received $1,200 cash from McNair Co. in partial settlement of its account receivable. There was no discount.

22 Received cash from Montez and Montez for its account receivable from November 15.

22 Sold goods on account to Diamond Co., $2,000 (cost, $1,300).

25 Collected $4,200 on a note receivable. There was no interest.

27 Cash sales for the week totaled $2,900 (cost, $1,900).

27 Sold inventory on account to Littleton Corporation, $600 (cost, $230).

28 Received goods from Diamond Co. as a sales return, $680. The cost of these goods was $390.

30 Received $1,510 cash on account from McNair Co. There was no discount.

Requirements

1. Use the appropriate journal to record the preceding transactions in a sales journal (omit the Invoice No. column), a cash receipts journal, and a general journal. Record sales returns and allowances in the general journal. (pp. 361, 365, 371)

2. Total each column of the sales journal and the cash receipts journal. Determine that total debits equal total credits. (p. 365)

3. Show how postings would be made from the journals by writing the account numbers and check marks in the appropriate places in the journals. (pp. 361, 365, 371)

Correcting errors in the cash receipts journal

4

P7-32B The following cash receipts journal shows 5 entries. All 5 entries are for legitimate cash receipt transactions, but the journal has some errors due to recording the transactions incorrectly. In fact, only 1 entry is correct, and each of the other 4 entries contains 1 error. Ignore posting references.

continued. . .

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CASH RECEIPTS JOURNAL

| | Debits | | Credits | | | | | Cost of Goods Sold Debit Inventory Credit |
| | | | | | Other Accounts | | | |
Date	Cash	3% Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	
May 1	582	18	600		Alliance Chemicals			
9			650	650	Carl Ryther			
10	8,000			8,000	Land			
19				70				44
30	1,000		1,000					631
31	8,582	1,018	1,250	9,720	Totals			675

Total Dr. = $9,600   Total Cr. = $10,970

Requirements

1. Identify the correct entry. (p. 365)
2. Identify the error in each of the other four entries. Cost of Goods Sold and Inventory are correct. (p. 365)
3. Prepare a corrected cash receipts journal using the following format. All column totals are correct in the cash receipts journal that follows. (p. 365)

CASH RECEIPTS JOURNAL

| | Debits | | Credits | | | | | Cost of Goods Sold Debit Inventory Credit |
| | | | | | Other Accounts | | | |
Date	Cash	3% Sales Discounts	Accounts Receivable	Sales Revenue	Account Title	Post. Ref.	Amount	
May 1	582	18	600		Alliance Chemicals			
9					Carl Ryther			
10					Land			
19								
30								
31	10,302	18	1,250	1,070	Totals		8,000	675

Total Dr. = $10,320   Total Cr. = $10,320

Using the purchases, cash payments, and general journals

5

P7-33B The general ledger of British Car Specialists includes the following accounts, along with their account numbers:

Cash	111	Equipment	189
Inventory	131	Accounts Payable	211
Prepaid Insurance	161	Rent Expense	562
Supplies	171	Utilities Expense	565

continued...

Transactions in January that affected purchases and cash payments were as follows:

Jan. 2	Paid monthly rent, debiting Rent Expense for $900.
5	Purchased inventory on credit from Sylvania Co., $5,000. Terms were 2/15 n/45.
6	Purchased supplies on credit terms of 2/10 n/30 from Harmon Sales, $800.
7	Paid utility bills, $400.
10	Purchased equipment on account from Lancer Co., $1,050. Payment terms were 2/10 n/30.
11	Returned the equipment to Lancer Co. It was defective.
12	Paid Sylvania Co. the amount owed on the purchase of January 5.
12	Purchased inventory on account from Lancer Co., $1,100. Terms were 2/10 n/30.
14	Purchased inventory for cash, $1,585.
15	Paid an insurance premium, debiting Prepaid Insurance, $2,410.
17	Paid electricity utility bill, $165.
19	Paid our account payable to Harmon Sales, from January 6.
20	Paid account payable to Lancer Co., from January 12.
21	Purchased supplies on account from Master Supply, $110. Terms were net 30.
22	Purchased inventory on credit terms of 1/10 n/30 from Linz Brothers, $900.
26	Returned inventory purchased for $500 on January 22, to Linz Brothers.
31	Paid Linz Brothers the net amount owed from January 22, less the return on January 26.

Requirements

1. Use the appropriate journal to record the preceding transactions in a purchases journal, a cash payments journal (omit the Check No. column), and a general journal. British Car Specialists records purchase returns in the general journal. (pp. 367, 369, 371)

2. Total each column of the special journals. Show that total debits equal total credits in each special journal. (pp. 367, 369)

3. Show how postings would be made from the journals by writing the account numbers and check marks in the appropriate places in the journals. (pp. 367, 369, 371)

Using all the journals,
posting, and balancing the
ledgers

4 5

P7-34B Prudhoe Bay Co. uses the perpetual inventory system and makes all credit sales on terms of 2/10 n/30. During March, Prudhoe Bay Co. completed these transactions:

Mar. 2 Issued invoice no. 191 for sale on account to L. E. Wooten, $2,350. Prudhoe Bay's cost of this inventory was $1,390.

3 Purchased inventory on credit terms of 3/10 n/60 from Delwood Plaza, $5,900.

4 Sold inventory for cash, $3,410 (cost, $1,820).

5 Issued check no. 473 to purchase furniture for cash $1,080.

8 Collected interest revenue of $120.

9 Issued invoice no. 192 for sale on account to Cortez Co., $6,250 (cost, $3,300).

10 Purchased inventory for cash, $770, issuing check no. 474.

12 Received $2,303 cash from L. E. Wooten in full settlement of her account receivable, net of the discount, from the sale of March 2.

13 Issued check no. 475 to pay Delwood Plaza net amount owed from March 3.

13 Purchased supplies on account from Havrilla Corp., $680. Terms were net end-of-month.

15 Sold inventory on account to J. R. Wakeland, issuing invoice no. 193 for $740 (cost, $410).

17 Issued credit memo to J. R. Wakeland for $740 for defective merchandise returned to us by Wakeland. Also accounted for receipt of the inventory at cost.

18 Issued invoice no. 194 for credit sale to L. E. Wooten, $1,825 (cost, $970).

19 Received $6,125 from Cortez Co. in full settlement of its account receivable from March 9.

20 Purchased inventory on credit terms of net 30 from Jasper Sales, $2,150.

22 Purchased furniture on credit terms of 3/10 n/60 from Delwood Plaza, $775.

22 Issued check no. 476 to pay for insurance coverage, debiting Prepaid Insurance for $1,345.

24 Sold supplies to an employee for cash of $80, which was Prudhoe Bay's cost.

25 Issued check no. 477 to pay utilities, $380.

28 Purchased inventory on credit terms of 2/10 n/30 from Havrilla Corp., $420.

29 Returned damaged inventory to Havrilla Corp., issuing a debit memo for $420.

29 Sold goods on account to Cortez Co., issuing invoice no. 195 for $1,800 (cost, $1,000).

continued...

30	Issued check no. 478 to pay Havrilla Corp. on account from March 13.
31	Received cash in full from L. E. Wooten on credit sale of March 18. There was no discount.
31	Issued check no. 479 to pay monthly salaries of $1,100.

Requirements

1. Open four-column general ledger accounts using Prudhoe Bay Co.'s account numbers that follow. (pp. 361–369)

Cash	111	Sales Revenue	411
Accounts Receivable	112	Sales Discounts	412
Supplies	116	Sales Returns and Allowances	413
Prepaid Insurance	117	Interest Revenue	419
Inventory	118	Cost of Goods Sold	511
Furniture	151	Salary Expense	531
Accounts Payable	211	Utilities Expense	541

2. Open these accounts in the subsidiary ledgers. Accounts receivable ledger: Cortez Co., J. R. Wakeland, and L. E. Wooten. Accounts payable ledger: Delwood Plaza, Havrilla Corp., and Jasper Sales. (pp. 361, 367)

3. Enter the transactions in a sales journal (page 8), a cash receipts journal (page 3), a purchases journal (page 6), a cash payments journal (page 9), and a general journal (page 4), as appropriate. (pp. 361, 365, 367, 368–369, 371)

4. Post daily to the accounts receivable ledger and to the accounts payable ledger. On March 31, post to the general ledger. (pp. 361, 365, 367, 368–369, 371)

5. Total each column of the special journals. Show that total debits equal total credits in each special journal. (pp. 361, 365, 367, 368–369)

6. Balance the total of the customer account balances in the accounts receivable ledger against Accounts Receivable in the general ledger. Do the same for the accounts payable ledger and Accounts Payable in the general ledger. (pp. 366, 370)

for 24-7 practice, visit www.MyAccountingLab.com

Apply Your Knowledge

Decision Cases

Reconstructing transactions from amounts posted to the accounts receivable subsidiary ledger

4

Case 1. A fire destroyed certain accounting records of Golden Books. The owner, Marilyn Golden, asks your help in reconstructing the records. *She needs to know (1) the beginning and ending balances of Accounts Receivable, (2) the sales on account and (3) total cash receipts on account from customers during April.* All of the sales are on account, with credit terms of 2/10 n/30. All cash receipts on account reached the store within the 10-day discount period, except as noted. The only accounting record preserved from the fire is the accounts receivable subsidiary ledger, which follows. (p. 365)

Garcia Sales

Date	Item	Jrnl. Ref.	Debit	Credit	Balance
Apr. 1	Balance				450
3		CR.8		450	-0-
25		S.6	3,600		3,600
29		S.6	1,100		4,700

Leewright, Inc.

Date	Item	Jrnl. Ref.	Debit	Credit	Balance
Apr. 1	Balance				2,800
15		S.6	2,600		5,400
29		CR.8		1,500*	3,900

*Cash receipt did not occur within the discount period.

Sally Jones

Date	Item	Jrnl. Ref.	Debit	Credit	Balance
Apr. 1	Balance				1,100
5		CR.8		1,100	-0-
11		S.6	400		400
21		CR.8		400	-0-
24		S.6	2,000		2,000

Jacques LeHavre

Date	Item	Jrnl. Ref.	Debit	Credit	Balance
Apr. 1	Balance				-0-
8		S.6	2,400		2,400
16		S.6	900		3,300
18		CR.8		2,400	900
19		J.5		200	700
27		CR.8		700	-0-

Designing a special journal

4   5

Case 2. MicroData Solutions sells cutting-edge networking software. MicroData's quality control officer estimates that 20% of the company's sales and purchases of inventory are returned for additional debugging. MicroData needs special journals for:

- Sales returns and allowances

- Purchase returns and allowances

Requirements

1. Design the two special journals. For each special journal, include a column for the appropriate business document (credit memo or debit memo). (pp. 371, Challenge)

2. Enter one transaction in each journal, using the In Motion transaction data illustrated on pages 361–371. Show all posting references, including those for column totals.

Ethical Issue

On a recent trip to Africa, J. T. Brown, sales manager of Prompt Technology, took his wife along at company expense. Linda White, vice president of sales and Brown's boss, thought his travel and entertainment expenses seemed excessive. But White approved the reimbursement because she owed Brown a favor. White was aware that the company president reviews all expenses recorded in the cash payments journal, so White recorded Brown's wife's expenses in the *general* journal as follows:

| Sales Promotion Expense | 9,100 | |
| Cash | | 9,100 |

Requirements

1. Does recording the transaction in the *general* journal rather than in the cash payments journal affect the amounts of cash and total expenses reported in the financial statements?

2. Why did White record these expenses in the *general* journal?

3. What is the ethical issue in this situation? What role does accounting play in this issue?

Team Projects

Project 1. Preparing a Business Plan for a Merchandising Entity. As you work through Chapters 6 through 12, you will be examining in detail the current assets, current liabilities, and plant assets of a business. Most of the organizations that form the context for business activity in the remainder of the book are merchandising entities. Therefore, in a group or individually—as directed by your instructor—develop a plan for beginning and operating an audio/video store or other type of business. Develop your plan in as much detail as you can. Remember that the business manager who attends to the most details delivers the best product at the lowest price for customers!

Project 2. Preparing a Business Plan for a Service Entity. List what you have learned thus far in the course. On the basis of what you have learned, refine your plan for promoting a rock concert (from Team Project 2 in Chapter 1) to include everything you believe you must do to succeed in this business venture.

For Internet Exercises, Excel in Practice, and additional online activities, go to the Web site www.prenhall.com/horngren.

Quick Check Answers

1. *a*   2. *d*   3. *b*   4. *c*   5. *b*   6. *d*   7. *d*   8. *a*   9. *c*   10. *b*

Comprehensive Problem for Chapters 1–7

Completing The Accounting Cycle for a Merchandising Entity—Using Special Journals

A-1 Networking Systems closes its books and prepares financial statements monthly. A-1 uses the perpetual inventory system. The company completed the following transactions during August:

Aug. 1	Issued check no. 682 for August office rent of $1,000. (Debit Rent Expense.)
1	Issued check no. 683 to pay the salary payable of $1,250 from July 31.
2	Issued invoice no. 503 for sale on account to R. T. Loeb, $600. A-1's cost of this merchandise was $190.
3	Purchased inventory on credit terms of 1/15 n/60 from Grant, Inc., $1,400.
4	Received net amount of cash on account from Fullam Company, $2,156, within the discount period.
4	Sold inventory for cash, $330 (cost, $104).
5	Received from Park-Hee, Inc., merchandise that had been sold earlier for $550 (cost, $174). (Record this sales return in the general journal.)
5	Issued check no. 684 to purchase supplies for cash, $780.
7	Issued invoice no. 504 for sale on account to K. D. Skipper, $2,400 (cost, $759).
8	Issued check no. 685 to pay Federal Company $2,600 of the amount owed at July 31. This payment occurred after the end of the discount period.
11	Issued check no. 686 to pay Grant, Inc., the net amount owed from August 3.
12	Received cash from R. T. Loeb in full settlement of her account receivable from August 2.
16	Issued check no. 687 to pay salary expense of $1,240.
19	Purchased inventory for cash, $850, issuing check no. 688.
22	Purchased furniture on credit terms of 3/15 n/60 from Beaver Corporation, $510.
23	Sold inventory on account to Fullam Company, issuing invoice no. 505 for $9,966 (cost, $3,152).
24	Received half the July 31 amount receivable from K. D. Skipper—after the end of the discount period.
26	Purchased supplies on credit terms of 2/10 n/30 from Federal Company, $180.
30	Returned damaged inventory to company from whom A-1 made the cash purchase on August 19, receiving cash of $850.
31	Purchased inventory on credit terms of 1/10 n/30 from Suncrest Supply, $8,330.
31	Issued check no. 689 to Lester Mednick, owner of the business, for personal withdrawal, $1,700.

Requirements

1. Open these four-column accounts with their account numbers and July 31 balances in the various ledgers. (p. 80)

GENERAL LEDGER

101	Cash	$ 4,490
102	Accounts Receivable	22,560
105	Inventory	41,800
109	Supplies	1,340
117	Prepaid Insurance	2,200
160	Furniture	37,270
161	Accumulated Depreciation	$10,550
201	Accounts Payable	12,600
204	Salary Payable	1,250
208	Unearned Sales Revenue	
220	Note Payable, Long-term	31,000
301	Lester Mednick, Capital	54,260
302	Lester Mednick, Withdrawals	
400	Income Summary	
401	Sales Revenue	
402	Sales Discounts	
403	Sales Returns and Allowances	
501	Cost of Goods Sold	
510	Salary Expense	
513	Rent Expense	
514	Depreciation Expense	
516	Insurance Expense	
519	Supplies Expense	

Accounts Receivable Subsidiary Ledger: Fullam Company $2,200; R. T. Loeb, $0; Park-Hee, Inc., $11,590; K. D. Skipper, $8,770. (pp. 80, 362)

Accounts Payable Subsidiary Ledger: Beaver Corporation, $0; Federal Company, $12,600; Grant, Inc., $0; Suncrest Supply, $0. (pp. 80, 362)

2. Journalize the August transactions in a series of special journals: a sales journal (page 4), a cash receipts journal (page 11), a purchases journal (page 8), a cash payments journal (page 5), and a general journal (page 9). A-1 makes all credit sales on terms of 2/10 n/30. (pp. 361–371)

3. Post daily to the accounts receivable subsidiary ledger and the accounts payable subsidiary ledger. On August 31, post to the general ledger. (pp. 361–371)

4. If required by your instructor, prepare a trial balance in the Trial Balance columns of a work sheet, and use the following information to complete the work sheet for the month ended August 31: (p. 279)

a. Supplies on hand, $990.
b. Prepaid insurance expired, $550.
c. Depreciation expense, $230.
d. Accrued salary expense, $1,030.
e. Unearned sales revenue, $450.*
f. Inventory on hand, $46,700.

5. Journalize and post the adjusting and closing entries. (pp. 141–142, 268)

*At August 31, $450 of unearned sales revenue needs to be recorded as a credit to Unearned Sales Revenue. Debit Sales Revenue. Also, the Cost of the merchandise ($142) needs to be debited to Inventory and credited to Cost of Goods Sold.