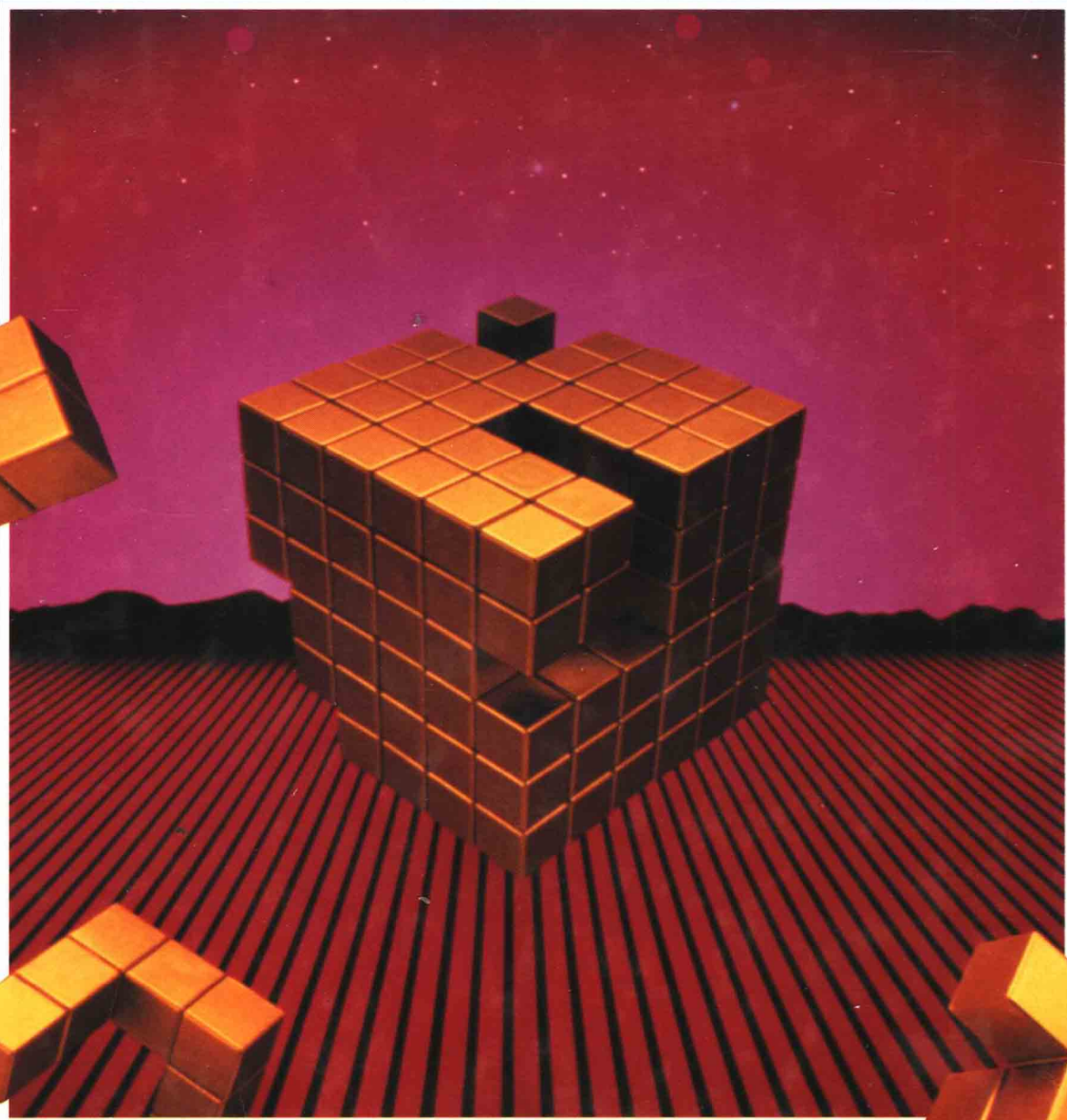


G L E N C O E

# COMPUTERIZED ACCOUNTING



INTEGRATED GENERAL LEDGER ACCOUNTING  
SPREADSHEET ACCOUNTING  
TURBO TAX

# COMPUTERIZED ACCOUNTING

## DOS VERSION

**Emma Jo Spiegelberg**

Laramie High School  
Laramie, Wyoming

**Carol Yacht**

Yavapai College  
Clarkdale, Arizona

**Christopher R. Schaber**

Thomas More College  
Crestview Hills, Kentucky

FSCreations  
Cincinnati, Ohio

**Phyllis Lentz**

Consulting Editor  
Orange County Public Schools  
Orlando, Florida

***GLENCOE***

---

McGraw-Hill

New York, New York

Columbus, Ohio

Mission Hills, California

Peoria, Illinois



Copyright © 1995 by Glencoe/McGraw-Hill. All rights reserved. Except as permitted under the United States Copyright Act, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without prior written permission from the publisher.

Send all inquiries to:

Glencoe/McGraw-Hill  
936 Eastwind Drive  
Westerville, OH 43081  
ISBN 0-02-803663-8

Printed in the United States of America.

3 4 5 6 7 8 9 10 11 12 13 14 15 QPK/MC 02 01 00 99 98 97 96 95

Lotus and 1-2-3 are registered trademarks of Lotus Development Corporation.  
Microsoft and MS-DOS are registered trademarks of Microsoft Corporation.  
TurboTax for DOS is a registered trademark of ChipSoft, Inc.  
IBM is a registered trademark of International Business Machines Corporation.  
Windows is a trademark of Microsoft Corporation.





## PREFACE

After your students learn the fundamental principles and concepts of accounting, what's next? A logical next step is to build on these understandings by applying them to real world technology. *Computerized Accounting* is a comprehensive textbook and software program that will help your accounting students make a smoother transition from the classroom to the workplace.

*Computerized Accounting* consists of three units: Unit 1—Computerized Accounting, Unit 2—Spreadsheets, and Unit 3—*TurboTax*. You can take your students from the most basic computerized accounting tasks to income tax preparation all in one textbook!

Throughout Unit 1, your students will learn how to use the *Glencoe Integrated Accounting* (Version 2.0) software to implement a diverse selection of accounting problems. They will use the general ledger system, integrated bank reconciliation tool, graphs, payroll module, inventory system, and the plant asset register. Important accounting concepts are also reinforced in these chapters to help students make the transition from a manual accounting system to a computerized system.

Unit 2 introduces spreadsheet terminology using *Lotus®1-2-3®* (Version 2.1) and *Microsoft® Works* (Version 3.0) software. Specific step-by-step instructions lead your students through the fundamental concepts, from formatting data and entering formulas to building their own spreadsheets and creating graphs.

In Unit 3, you can introduce your students to one of the most popular tax preparation software packages—*TurboTax®*. The chapter explains how to prepare both personal and business tax forms.

## MAJOR CHANGES IN THE TEXTBOOK ▼

The textbook includes significant enhancements to facilitate the learning process. These changes are the result of invaluable feedback provided by numerous instructors. A description of these new features appear below.

- **NEW Expanded Coverage**—Two new chapters explain how to use the integrated inventory system and plant asset register that are built into the software. A comprehensive discussion addresses the issues and concepts involved in maintaining an inventory database. The textbook also includes expanded coverage of the integrated bank reconciliation tool and the graphs (charts) incorporated into the software.
- **NEW Spreadsheets**—The two chapters on spreadsheets teach your students how to enter formulas, format and copy data, print a worksheet, modify financial reports exported by the accounting software, and prepare charts. The text takes your students step by step through the process of analyzing a problem and building a spreadsheet from scratch using *Microsoft Works* and *Lotus 1-2-3*.
- **NEW *TurboTax***—This chapter introduces basic tax concepts using personal income tax forms as a model. The chapter also expands and

reinforces your students' understanding of the tax requirements for a business. The textbook discusses several other tax issues and includes a variety of problems for use with the TurboTax software.

- **NEW Icons**—The textbook design now incorporates icons to assist students in learning and effectively using the accounting software.



When your students see this icon, they will know to perform the corresponding steps using the software.



This icon identifies how to use the mouse to perform various functions such as choosing an option from a menu, resizing a window, scrolling through a list, and clicking a button.



Whenever your students encounter a situation that requires special attention, this icon serves as a reminder or warning. Detailed instructions or notes explain the action to be taken.



The icon shown here reminds your students to carefully proof their work before continuing with the next step.

- **NEW Two-Color Format**—A new, two-color format provides your students with a textbook designed to make learning easier.
- **NEW Margin Notes**—Throughout the text, margin notes reinforce major concepts or provide helpful hints. Objectives also appear in the margin to help your students focus their learning.
- **NEW Vocabulary**—Key terms introduced in the text appear at the beginning of each chapter. Definitions of these terms are provided within the chapter, after the chapter summary, and in a comprehensive glossary.
- **NEW Self-Reviews**—Check figures included in the textbook at key intervals assist students in verifying their work. These self-reviews keep your students on track as they complete the sample problems in the chapters.
- **NEW Study Guide and Working Papers**—Input forms, end-of-chapter review exercises, and analysis questions are now offered in a separate student study guide and working papers edition.

## NEW SOFTWARE FEATURES ▼

The *Glencoe Integrated Accounting* software has been updated to provide your students with a comprehensive accounting package that rivals many commercial accounting applications. Beginning with Version 2.0, the *Glencoe Integrated Accounting* software is the only educational accounting package available in MS-DOS, Macintosh, and Windows formats.

The software includes these new features:

- **NEW Mouse Support**—Version 2.0 fully supports an optional Microsoft (or compatible) mouse. Using the mouse, students can select menu options, click on radio buttons and check boxes, move or resize a window, click on a button, move to a data entry field, and perform many other functions.
- **NEW Enhanced Graphical User Interface**—If the software is run on a computer with a VGA monitor, an enhanced graphical user interface is automatically presented that simulates a Windows environment. Radio buttons appear as complete circles rather than parentheses. Other elements

such as the close box, scroll bars, check boxes, and buttons are also visually enhanced. However, older color and monochrome monitors are still 100% supported by the software.

- **NEW Problem Sets**—The revised software (Version 2.0) is completely compatible with all the problem sets you currently are using including those you have created. Student (work-in-progress) files are also compatible. If you decide to upgrade to the Windows version, you can continue using any problem sets you may have created for the MS-DOS version.
- **NEW Graphs**—Several charts and graphs can be displayed to allow your students to visualize the accounting data. Charts such as customer balances, vendor balances, actual vs. budget, aged accounts receivable, and more are available if your students are using a color or composite monitor. Graph types include pie chart, bar chart, line graph, and 3D bar charts.
- **NEW Integrated Bank Reconciliation**—The bank reconciliation tool is now integrated with the general ledger system. Select the bank reconciliation option, then simply pop up a list of the checks appearing in the cash payments journal and mark those that are outstanding. After completing the form, your students can direct the program to automatically record the bank service charge in the cash payments journal.
- **NEW Export to Lotus 1-2-3**—Selected reports can be exported to a Lotus 1-2-3 spreadsheet format. Therefore, you can extend problems by instructing your students to use a spreadsheet to perform additional analysis on the accounting data generated by the software.
- **NEW Inventory System**—The cost of inventory tool is still provided, but a more extensive, integrated inventory system is now incorporated into the software. Using this system, inventory transactions can be entered (sales, returns, purchases, etc.). An adjusting entry is automatically generated at the end of the fiscal period to reflect the current value of merchandise inventory.
- **NEW Plant Asset System**—An integrated plant asset system is now included in the accounting software along with the depreciation tool. Entries for asset acquisitions, disposal of assets, and adjustments for depreciation are automatically generated by the software.
- **NEW General Journal Report**—The dialog box used to print the general journal report now includes an option to generate a printout based upon the comment recorded as part of an entry. For example, your students could choose to print only the adjusting entries.
- **NEW Improved Calculator**—The calculator now includes a “paper tape” option so that your students can review their calculations or print the output if desired. Simply click a button to display the “paper tape” area, or hide it if you don’t need to see that information.
- **NEW Enhanced Reports**—Reports are now printed with a page number on each page to facilitate handling of long reports. Also, reports can be printed to an ASCII file and then imported using almost any word processor.
- **NEW Color**—Now you can change the colors in the program to meet your preferences. Simply choose a color option and press a button to modify the color settings.



## TEMPLATES ▼

Template disks accompany the *Computerized Accounting* text. These disks include templates for the accounting problems, spreadsheet activities, and *TurboTax* problems. These templates facilitate the learning process by allowing your students to focus on learning the software—not just key data. For most accounting problems, the template files include the chart of accounts, opening balances, vendors, and customer data. Beginning a new problem is as easy as opening a file. While working with the spreadsheet, the templates help reinforce important skills and concepts.

## RESOURCES FOR THE TEACHER ▼

A complete teacher's resource portfolio now accompanies the textbook. In the resource portfolio, you will find a wealth of information to help you introduce the concepts in the textbook. Innovative teaching suggestions will compliment your teaching style to help your students attain the maximum learning benefit from the course. Use the color transparencies to reinforce the features and capabilities of the *Glencoe Integrated Accounting* software, spreadsheet activities, and *TurboTax* software.

A comprehensive solutions manual and the solution software simplify the task of verifying your students' accounting work. To use the software, identify the solution, select a student's completed file, and press a button to analyze his/her work. If your students save their files on a network, you can check the work for an entire class in less than five minutes.

Since there are never enough problems in the textbook, the teacher's resource portfolio also includes supplemental problems for every chapter. Use these problems as additional assignments, reteaching exercises, extra credit work, or use them for testing purposes. Then, let the solution software verify the completed problems for you. Detailed step-by-step instructions guide you through the process of building your own problems if you want to computerize your favorite applications.

## HARDWARE REQUIREMENTS ▼

The *Glencoe Integrated Accounting* software is reproducible and network-ready. The software can run on the original IBM® PC as well as any 100% PC-compatible computer. The following minimum configuration is required:

- a color or monochrome monitor
- at least one floppy disk drive (5 ¼" or 3 ½")
- 512K memory (640K required for network workstations)
- MS-DOS 2.1 (or higher)
- printer (optional, but recommended)
- mouse (optional)

Emma Jo Spiegelberg  
Christopher R. Schaber

Carol Yacht  
Phyllis Lentz



# TABLE OF CONTENTS

## **Chapter 1 ▼ Introduction to Computerized Accounting 1**

Accounting Systems	2
Computerized Accounting	2
Hardware Requirements	3
Care and Handling of Diskettes	3
The Accounting Program	4
Data Entry Basics	11
Summary of Key Points	16
Chapter Glossary	17
Review and Applications	19

## **Chapter 2 ▼ Exploring the Accounting System 23**

Input Forms	24
Getting Started	27
What's in a Menu?	31
Chart of Accounts	38
Saving Your Work	44
Customer Accounts	46
Vendor Accounts	48
Ending the Accounting Session	49
Summary of Key Points	51
Chapter Glossary	51
Review and Applications	53

## **Chapter 3 ▼ Recording Transactions in the General Journal 63**

General Journal	64
Getting Started	68
Business Information	69
Using the General Journal	69
The Posting Process	75
General Ledger Reports	76
Proofing Your Work	77
Trial Balance	81
Financial Statements	81
Ending the Accounting Session	84
Summary of Key Points	86
Chapter Glossary	86
Review and Applications	88



<b>Chapter 4 ▼</b>	<b>Recording Transactions in the Sales and Cash Receipts Journals</b>	<b>97</b>
	Introduction to the Sales and Cash Receipts Journals	98
	Sales Journal	98
	Getting Started	103
	Integration Accounts	103
	Using the Sales Journal	104
	Cash Receipts Journal	109
	The Posting Process	115
	Proofing Your Work	117
	Accounts Receivable Reports	118
	Ending the Accounting Session	122
	Summary of Key Points	123
	Chapter Glossary	123
	Review and Applications	125
<b>Chapter 5 ▼</b>	<b>Recording Transactions in the Purchases and Cash Payments Journals</b>	<b>135</b>
	Introduction to the Purchases and Cash Payments Journals	136
	Purchases Journal	136
	Getting Started	143
	Using the Purchases Journal	143
	Cash Payments Journal	146
	The Posting Process	154
	Proofing Your Work	154
	Accounts Payable Reports	157
	Ending the Accounting Session	163
	Summary of Key Points	164
	Chapter Glossary	164
	Review and Applications	165
<b>Chapter 6 ▼</b>	<b>Completing the Accounting Cycle</b>	<b>179</b>
	Adjusting Entries	180
	Recording Adjustments Using the General Journal	183
	Financial Statements	185
	The Closing Process	188
	Ending the Accounting Session	189
	Deleting Files	190
	Summary of Key Points	191
	Chapter Glossary	191
	Review and Applications	192
<b>Application Activity 1 ▼</b>	<b>Pets &amp; More!</b>	<b>201</b>

<b>Chapter 7 ▼</b>	<b>Using Special Accounting Tools</b>	<b>209</b>
	Bank Reconciliation	210
	Depreciation	215
	Cost of Inventory	219
	Budget Analysis	222
	Analyzing Data Using Graphs	223
	Ending the Accounting Session	224
	Summary of Key Points	225
	Chapter Glossary	225
	Review and Applications	227
<b>Chapter 8 ▼</b>	<b>Advanced Accounts Payable Transactions and Partnerships</b>	<b>235</b>
	Partnerships	236
	Purchases on Account	239
	Purchases Returns and Allowances	241
	Purchases Discounts	243
	Withdrawals by Partners and Partial Payments	245
	Proofing Your Work	247
	Ending the Accounting Session	249
	Summary of Key Points	250
	Chapter Glossary	250
	Review and Applications	252
<b>Chapter 9 ▼</b>	<b>Advanced Accounts Receivable Transactions</b>	<b>267</b>
	Accounts Receivable Transactions	268
	Getting Started	275
	Proofing Your Work	276
	Determining the Adjustment for Uncollectible Accounts	276
	Ending the Accounting Session	277
	Summary of Key Points	280
	Chapter Glossary	280
	Review and Applications	282
<b>Chapter 10 ▼</b>	<b>Transactions and Financial Statements for Corporations</b>	<b>301</b>
	Corporations	302
	Capital Stock Transactions	302
	Adjusting Entries	308
	Financial Statements	309
	Proofing Your Work	313
	Exporting to Lotus® 1-2-3®	313
	Performing the Closing Process for a Corporation	314
	Ending the Accounting Session	315
	Summary of Key Points	316
	Chapter Glossary	316
	Review and Applications	318

<b>Application Activity 2 ▼</b>	<b>Expo Electronics, Inc.</b>	<b>329</b>
<b>Chapter 11 ▼</b>	<b>Recording the Payroll</b>	<b>337</b>
Introduction to Payroll		338
Computerized Payroll		339
Getting Started		342
Proofing Your Work		345
Displaying the Payroll Checks		347
Posting the Payroll		347
Paying the Payroll Tax Liabilities		350
Using Graphs		351
Ending the Accounting Session		351
Summary of Key Points		352
Chapter Glossary		353
Review and Applications		354
<b>Chapter 12 ▼</b>	<b>Advanced Financial Statement Analysis</b>	<b>371</b>
Introduction		372
Statement Analysis		372
What-If Analysis		377
Ending the Accounting Session		378
Summary of Key Points		379
Chapter Glossary		379
Review and Applications		380
<b>Application Activity 3 ▼</b>	<b>Sound City</b>	<b>387</b>
<b>Chapter 13 ▼</b>	<b>Using the Inventory System</b>	<b>397</b>
Computerized Inventory System		398
Input Forms		401
Getting Started		404
Using the Inventory System		405
Proofing Your Work		408
Inventory Reports		408
Merchandise Inventory Adjustment		411
Ending the Accounting Session		412
Summary of Key Points		413
Chapter Glossary		413
Review and Applications		414
<b>Chapter 14 ▼</b>	<b>Using the Plant Asset System</b>	<b>427</b>
Plant Asset System		428
Maintaining a Plant Asset Register		429
Using the Plant Asset Register		432
Proofing Your Work		434



Plant Asset Reports	434
Depreciation Adjustment	437
Comparing Depreciation Methods Using Graphs	438
Ending the Accounting Session	439
Summary of Key Points	440
Chapter Glossary	440
Review and Applications	441

## UNIT 2

### Chapter 15 ▼ Introduction to Spreadsheets 453

What Is a Spreadsheet?	454
Getting Started	454
Retrieving a Spreadsheet File	455
Exploring the Spreadsheet	458
Navigating a Spreadsheet	459
Basic Building Blocks of a Spreadsheet	462
Saving Your Work	470
Changing the Appearance of a Spreadsheet	471
Printing a Spreadsheet	474
What-If Analysis	477
Ending the Spreadsheet Session	478
Summary of Key Points	479
Chapter Glossary	479
Review and Applications	481

### Chapter 16 ▼ Working With and Building Spreadsheets 489

Updating a Spreadsheet	490
Copying and Moving Data	498
Preparing Charts	504
Building Your Own Spreadsheets	509
Summary of Key Points	513
Chapter Glossary	513
Review and Applications	514

## UNIT 3

### Chapter 17 ▼ TurboTax 523

Overview of the Software	524
Navigating the Screens	526
Getting Started	526
Completing a Tax Return	528
Naming the Tax Return (Step 1)	528
Transferring Tax Information (Step 2)	530
Importing Information (Step 3)	530
Filling Out the Tax Forms (Step 4)	531

File Cabinet (Step 5)	545
Final Review (Step 6)	546
Printing the Return (Step 7)	547
Filing Electronically (Step 8)	547
Backing Up Return (Step 9)	548
Preparing State Return (Step 10)	548
Ending the TurboTax Session	548
Summary of Key Points	549
Chapter Glossary	549
Review and Applications	551

<b>Appendices</b>	<b>559</b>
-------------------	------------

<b>Glossary</b>	<b>563</b>
-----------------	------------

<b>Index</b>	<b>573</b>
--------------	------------

# 1

## Introduction to Computerized Accounting

### Learning Objectives

When you have completed Chapter 1, you should be able to:

1. Discuss how computer technology can be used to automate an accounting system.
2. Explain the hardware requirements to run the accounting software.
3. Describe the guidelines for safely handling diskettes.
4. Identify the major components of the accounting software.
5. Explain how to communicate with the software.
6. Discuss how controls are used to manage data and work with the software.
7. Describe the basic process for entering data.
8. Define the terms introduced in this chapter.

### Key Terms

Accounting system	Ellipsis	Check box
Source document	Window	Field
Journal	Dialog box	Key-entering
Hardware	Prompt	Key
Software	Warning message	Cursor
MS-DOS	Error message	Numeric field
Operating system	Scroll bar	Alphanumeric field
Diskette	Thumb	Mouse
Integrated	Button	Clicking
Menu	Function key	Double-clicking
Pull-down menu	Escape key	Dragging
Menu bar	Radio button	Command key



## ACCOUNTING SYSTEMS ▼

An **accounting system** is the process of recording and reporting financial events or transactions. Regardless of the method used for recording and reporting transactions, all businesses must follow the same rules and guidelines. Whether businesses record transactions manually in a journal or electronically with a computer, they follow the same rules.

As you have already learned, many steps are involved in processing business transactions. First, you collect, verify, and analyze financial information to determine how to record it. Next, you record transactions by writing them in a journal with a pen or pencil or by key-entering them into a computer. Then, you produce reports by classifying and summarizing the financial information.

The primary goal of an accounting system is to provide the financial information needed to manage a business on a day-to-day basis. Until now you have focused on how this information is gathered from daily transactions and summarized in reports using a manual accounting system. Now, you have an opportunity to learn how computers can be applied to an accounting system.

## COMPUTERIZED ACCOUNTING ▼

Early in the evolution of computer technology and software, accountants recognized the benefits of increased speed and accuracy that could be attained by automating an accounting system. Although the methods for processing business transactions vary, the manual approach and a computerized system follow the same basic steps. The primary differences between the two accounting systems are the means of recording data and how reports are produced.

In a computerized system, the source documents generated by daily transactions are collected, verified, and analyzed in the same manner as in a manual system. An accountant or clerk collects the information from paper records of transactions called **source documents**. Examples of source documents are purchase orders, invoices, and receipts. The information is verified for accuracy and then analyzed to determine which accounts are affected by the transaction.

The next step is to record the transactions. In a manual system, the transactions are recorded by writing the account information and amounts in a journal. A **journal** is a record of the transactions shown in order by date. The transaction information recorded in a computerized accounting system is identical to the information recorded in a manual system, but the method of entering the transaction information differs. Rather than writing the information by using a pen or pencil, an accountant or clerk enters data by using the keyboard.

After entering the financial information, the accountant uses the power of the computer to classify and summarize the data. The computer automatically performs the process of posting to the general ledger. Reports such as a Trial Balance, Income Statement, and Balance Sheet can be printed in seconds by entering a few keystrokes.

Whether you are currently learning accounting or are already familiar with basic accounting concepts, you can use this knowledge with a computerized system. The key to using the accounting software is to apply the concepts you already understand. Follow the same basic steps to collect, verify, analyze, record, classify, summarize, and report the financial events. The *Glencoe Integrated Accounting* software has been designed to help make the transition from

### OBJECTIVE 1

Discuss how computer technology can be used to automate an accounting system.

The accounting cycle involves collecting, verifying, analyzing, recording, classifying, summarizing, and reporting financial transactions.

a manual to a computerized accounting system easier. In the following sections and chapters, you will learn how to use the software and how to apply your existing accounting skills to benefit from the potential of an automated accounting system.

## HARDWARE REQUIREMENTS ▼

### OBJECTIVE 2

Explain the hardware requirements to run the accounting software.

The accounting software you will be using with this text requires a minimum hardware configuration. **Hardware** represents the physical components of your computer system such as the monitor, disk drives, and memory. The **software** consists of programs that instruct the computer to perform the desired functions.

Before you operate the accounting software, verify that your computer meets or exceeds the minimum requirements listed for the type of computer equipment available to you.

### MS-DOS

In 1981, IBM introduced its first microcomputer. The original IBM PC computer set a standard that many companies in the computer industry have since followed. This standard is based on the operating system from Microsoft called **MS-DOS**. The **operating system** controls the computer and how the computer performs basic tasks such as saving files or displaying information on the monitor.

Today, numerous manufacturers such as Tandy, Compaq, and Zenith produce PC-compatible computers based on the MS-DOS standard. Many of these computers vary based on speed and memory, but they all adhere to the same underlying standards.

### Minimum Configuration

All computers based on the MS-DOS operating system work in the same manner and can use the same software given the proper configuration. The *Glencoe Integrated Accounting* software will run on the original IBM PC as well as on any 100% PC-compatible computer like the one shown in Figure 1-1, p. 4. The following minimum configuration is required:

- a color or monochrome monitor
- at least one floppy disk drive (5.25" or 3.5")
- 512K memory (640K for network workstations)
- MS-DOS 2.1 (or higher)
- printer (optional, but recommended)

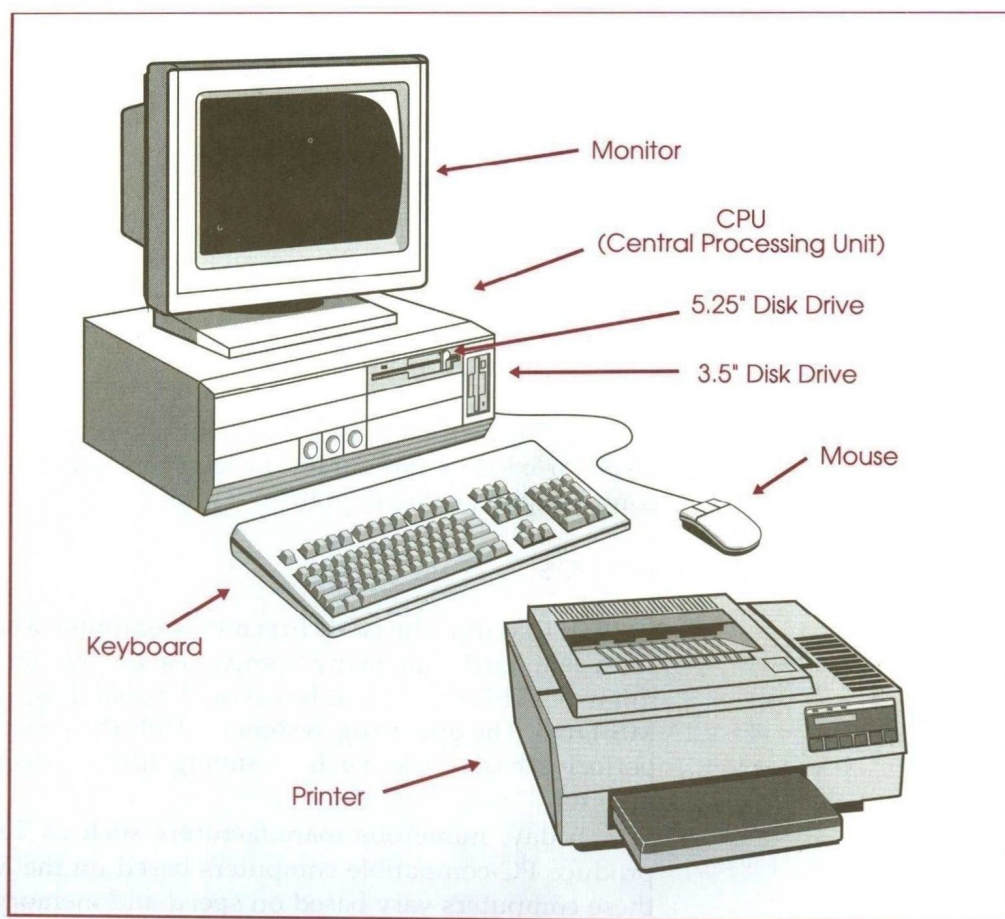
## CARE AND HANDLING OF DISKETTES ▼

### OBJECTIVE 3

Describe the guidelines for safely handling diskettes.

The accounting software is provided on magnetic media called **diskettes** in both 3.5" and 5.25" formats. The business information you create while working with the program is also recorded on a diskette for later retrieval. You should handle the diskettes used for storing the programs and information very carefully. Though durable, the diskettes are subject to damage from many sources as illustrated in Figure 1-2, p. 5.





**Figure 1-1** An MS-DOS Compatible System

As you work through the accounting program, you will create a significant amount of financial information requiring several hours of your time spent at the computer. Following the diskette handling guidelines will help you protect the valuable data you have entered.

Another important rule of computing is to back up your files. In addition to following the guidelines for the proper care of diskettes, you should make a backup copy of your diskette. By making a backup copy at regular intervals, you will have an alternate source to use in the event your diskette is accidentally damaged.

### REMEMBER

*As a first step in preparing to run any program, be sure to verify that the hardware you are using is configured properly. While using the software, protect your data by following the appropriate procedures and by making a backup copy at regular intervals.*

The accounting software components—account maintenance, journals, support tools, and reports—are integrated to form a cohesive system.

## THE ACCOUNTING PROGRAM ▼

The accounting program includes the components and features necessary to perform all of the steps in the accounting cycle from recording business transactions to preparing reports. The many components of the accounting program are **integrated** or linked together. While components may each seem separate, they work together to form a complete accounting system. For example, transactions entered in the general journal are automatically posted to the general