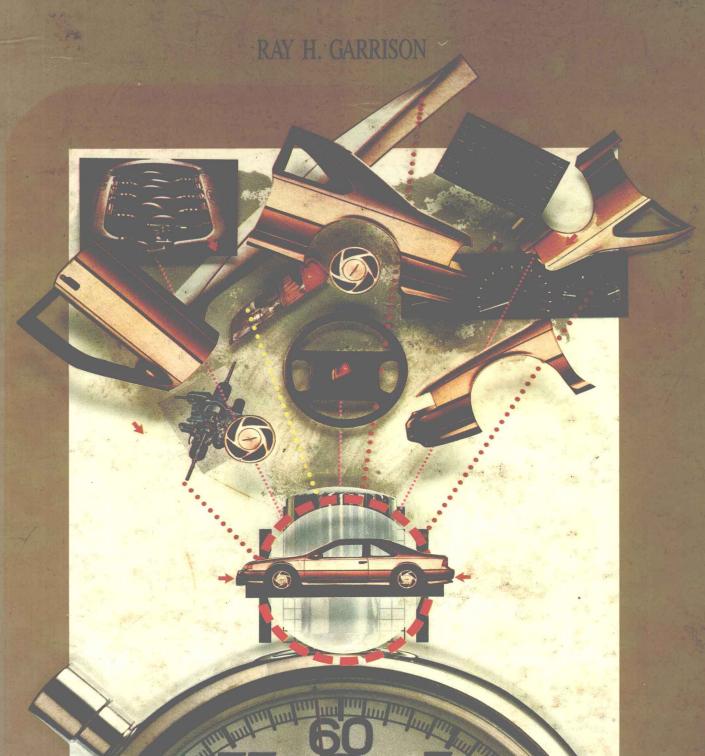
Sixth Edition

# MANAGERIAL ACCOUNTING



# MANAGERIAL ACCOUNTING CONCEPTS FOR PLANNING, CONTROL, DECISION MAKING

Sixth Edition

RAY H. GARRISON, D.B.A., CPA

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#### To my wife, Mary Jean,

who has contributed greatly to the success of this book through encouragement, assistance in proofing, and the willingness to give up many hours of my time to which she had a clear and rightful claim.

.....

# Preface

This text is designed for a one-term course in managerial accounting for use by students who have already completed one or two terms of basic financial accounting. The emphasis of *Managerial Accounting* is on uses of accounting data internally by managers in directing the affairs of business and nonbusiness organizations.

As suggested by the subtitle to the book, managers need information to carry out three essential functions in an organization: (1) planning operations; (2) controlling activities; and (3) making decisions. The purpose of *Managerial Accounting* is to show what kind of information is needed, where this information can be obtained, and how this information is used by managers as they carry out their planning, control, and decision-making responsibilities.

Although the emphasis of the book is on uses of accounting data in the management process, care has been taken to not sacrifice the student's need for basic technical understanding. To this end, topics are covered in enough depth to ensure full comprehension of basic concepts. Thus, armed with both conceptual and technical understanding, students are able to proceed with confidence in applying managerial skills to a wide variety of organizational problems as contained in the end-of-chapter assignments.

A paramount objective in the writing of Managerial Accounting, as well as in its various revisions, has been to make a clear and balanced presentation of relevant subject matter. This focus on relevance continues in the current edition where greater recognition is given to many exciting new concepts that are reshaping traditional costing systems and procedures. Accordingly, users will find extensive discussion of topics such as just-in-time systems, activity-based costing, flexible manufacturing systems, computer-integrated performance measures, and the impact of automation on capital budgeting decisions. Moreover, these topics are integrated into the text and problem material throughout the book, rather than isolated in one or two chapters at the end. Also, in recognition of the widespread application of management accounting concepts, users will find many examples and problems that deal with not-for-profit, service, retail, and wholesale organizations as well as examples and problems that deal with manufacturing organizations. In short, the watchwords for this edition of Managerial Accounting have again been relevance of subject matter, balance of topics, and a continued tradition of clarity in presentation.

viii PREFACE

#### **New in This Edition**

The following specific additions and changes have been made to the current edition of *Managerial Accounting:* 

- As in prior editions, special attention has been given to writing new exercise and problem material. The majority of exercises and problems in the current edition are therefore either new or completely rewritten. Users will again find a wide range of problems in terms of level of difficulty.
- 2. The use of short cases is continued in the current edition. To keep the material fresh and challenging, the majority of these cases are either new or rewritten.
- 3. The material on just-in-time (JIT) inventories has been removed from Chapter 8, expanded and rewritten, and moved to Chapter 2, "Cost Terms, Concepts, and Classifications." Also, an introductory discussion of flexible manufacturing systems (FMS) has been added to Chapter 2. It is important to introduce JIT and FMS concepts early in the book because of their pervasive impact on other managerial accounting topics.
- 4. The discussion on overtime premium, fringe benefits, and related labor costs has been removed from the main body of Chapter 2 and placed in an appendix. This change reflects the decreasing importance of trying to distinguish between the costs of direct and indirect labor.
- 5. A major, new section dealing with activity-based costing has been added to Chapter 3, "Systems Design: Job-Order Costing." The relationship between activity-based costing and JIT inventory systems is also discussed. Both problems and cases relating to activity-based costing have been added to the chapter.
- An appendix that deals with cost flows in a JIT system has been added to Chapter 3. This material compares JIT to a conventional system, and discusses the concept of backflush costing.
- In Chapter 4, "Systems Design: Process Costing," the production report has been modified somewhat to allow a simpler and more direct computation of equivalent units.
- 8. A new section that discusses the impact of JIT inventory systems on process costing has been added to Chapter 4.
- Another new section has been added to Chapter 4 that discusses operation costing and identifies the situations in which it may be useful to the manager.
- A discussion of the impact of automation on cost-volume-profit (CVP) analysis has been added in Chapter 6.
- 11. Material that discusses the impact of a JIT system on the differences in net income between absorption and direct costing has been added to Chapter 7, "Segmented Reporting and the Contribution Approach to Costing."
- 12. Material relating to the master budget income statement has been removed from Chapter 10 and moved to Chapter 8, "Profit Planning," where it fits more logically. With this change, the general concept of flexible budgeting is now introduced in Chapter 8.
- A major, new section that deals with JIT purchasing has been added to Chapter
   This section also helps students to understand the difference between JIT purchasing and JIT production.
- 14. Chapter 9, which was titled "Control through Standard Costs" in the prior edition, has been retitled "Standard Costs and JIT/FMS Performance Measures." This new title reflects the addition to the chapter of performance measures that relate to throughput time, delivery cycle time, velocity of production, and so forth in an automated environment.
- 15. With the movement of the master budget income statement to Chapter 8, Chapter 10, "Flexible Budgets and Overhead Analysis," now focuses only on overhead costs, as it did in earlier editions of the book.

PREFACE

ix

16. A key exhibit, titled Elements of Return on Investment, has been added to Chapter 11, "Control of Decentralized Operations." This exhibit serves as the basis for the ROI discussion in the chapter.

- 17. A major, new section that deals with investments in an automated environment has been added to Chapter 14, "Capital Budgeting Decisions." This section provides an extensive discussion of both tangible and intangible benefits from automation, with particular emphasis on how intangible benefits can be integrated into the capital budgeting decision framework.
- 18. The material relating to payback and simple rate of return has been moved from Chapter 15 back to Chapter 14. With this reorganization, Chapter 14 now contains both discounted cash flow and nondiscounted cash flow approaches to capital budgeting decisions.
- 19. The material in Chapter 14 dealing with the mechanics of present value has been removed from the body of the chapter and placed in an appendix. This material is becoming less important as greater numbers of students are exposed to present value analysis in basic math and statistics classes.
- 20. The content of Chapter 16, "Service Department Cost Allocations," has been reorganized somewhat to allow discussion of the direct method of allocation before discussion of the more complex step method.
- 21. The sequence of Chapters 17 and 18 has been reversed so that Chapter 17 now covers the statement of cash flows and Chapter 18 covers financial statement analysis.
- 22. The material in Chapter 17, "Statement of Cash Flows," has been updated to make it wholly consistent with the FASB's Statement No. 95 on cash flow reporting.
- Since the Statement of Working Capital is no longer acceptable for reporting purposes, all material relating to this statement has been removed from Chapter 17.

In addition to the above, scores of small "polishing" changes have been made throughout the book in an effort to further improve flow, comprehension, and readability. In no case, however, has change been made simply for the sake of change (other than in the assignment material). Rather, the revision has been completed with a single thought in mind—to make the sixth edition of *Managerial Accounting* the most up-to-date and teachable book available in its field.

#### Using the Text and Its Supplements

As in the prior editions, flexibility in meeting the needs of courses varying in length, content, and student composition continues to be a prime concern in the organization and content of the book. Sufficient text material is available to permit the instructor to choose topics and depth of coverage as desired. Appendixes, parts of chapters, or even whole chapters can be omitted without adversely affecting the continuity of the course. A Solutions Manual is available that gives a number of alternate assignment outlines and suggestions as to the problems to be assigned from various chapters.

The book contains over 800 questions, exercises, problems, and cases for in-class use or for homework assignment. In addition, a comprehensive test bank is available for preparing examinations and quizzes. The Test Bank contains over 1,000 objective questions and short problems. My appreciation is extended to Professor Kevin D. Stocks, Brigham Young University, who prepared the test bank materials.

Spreadsheet Applications Template Software (SPATS), a new software package, permits students to use the computer in working selected exercises, problems, and cases from the end-of-chapter assignment material. The exercises and problems involved are keyed in the margin with the spreadsheet symbol shown here in the margin. Little or no classroom instruction time is needed to teach students how to



use the templates since they contain built-in tutorial material. In addition to SPATS, Tutorial Software prepared by Leland Mansuetti of Sierra College is available. This package includes true/false and multiple-choice questions with explanations for both correct and incorrect answers by students. Upon adoption, these packages are available to instructors for classroom or laboratory use.

The following additional items are provided for instructors: an attractive binder containing a three-hole-punched copy of the text; an Instructor's Resource Guide, which contains chapter outlines and transparency masters for classroom instruction; Solutions Transparencies for homework exercises and problems; copies of Lotus templates with worked-out solutions that accompany SPATS; Check Figures for problems; and CompuTest 3 for preparing examinations.

For students, a Workbook/Study Guide is available for purchase, as are Working Papers keyed to end-of-chapter problems.

#### Acknowledgments

Ideas and suggestions have been received from many faculty members who used the prior edition of *Managerial Accounting*. Each has my thanks, since the book is a better product as a result of their insightful comments.

The efforts of many people are needed to develop a book and improve it from edition to edition. Among these people are the reviewers who point out areas of concern, cite areas of strength, and make recommendations for change. In this regard, the following professors spent considerable time providing in-depth reviews for the current edition of *Managerial Accounting:* Virginia Lewis, Southern Methodist University; Thomas J. O'Neil, American International College; S. E. Clair Purvis, University of Southern California; Paul W. Ramsey, Pensacola Junior College; Donald E. Stone, University of Massachusetts—Amherst; Gwendolyn Totterdale, San Diego State University; and Michael F. Thomas, Oklahoma State University.

Permission has been received from the Institute of Certified Management Accountants of the National Association of Accountants to use questions and/or unofficial answers from past Certificate in Management Accounting (CMA) examinations. Also, my appreciation is extended to the American Institute of Certified Public Accountants and to the Society of Management Accountants of Canada for permission to use (or to adapt) selected problems from their examinations. These problems bear the notations CMA, CPA, and SMA, respectively.

Ray H. Garrison

# Contents in Brief

Managerial Accounting—A Perspective **PART I** THE FOUNDATION Cost Terms, Cost Behavior, and Systems Design Cost Terms, Concepts, and Classifications 24 3 Systems Design: Job-Order Costing 64 Systems Design: Process Costing 127 Cost Behavior: Analysis and Use 164 **PART II** THE CENTRAL THEME **Planning and Control** 

Cost-Volume-Profit Relationships

Flexible Budgets and Overhead Analysis

Control of Decentralized Operations

**Profit Planning** 

10

11

Segmented Reporting and the Contribution Approach to Costing

Standard Costs and JIT/FMS Performance Measures

1

206

252

304

359

408

451 хi

### PART III

### THE CAPSTONE Using Cost Data in Decision Making

12 13 14 15	Relevant Costs for Decision Making Capital Budgeting Decisions		504 543 593 655
	SELECTED	PART IV TOPICS FOR FURTHER STUDY	
16 17 18	Service Department Cost Al "How Well Am I Doing?" "How Well Am I Doing?"		690 720 764
Inde	X		807

## Contents

#### 1 Managerial Accounting—A Perspective

Organizations and Their Objectives 2 Setting Objectives Strategic Planning The Work of Management The Planning and Control Cycle 5 Organizational Structure 6 Decentralization 6 Line and Staff Relationships The Controller Basic Similarities among Organizations The Manager's Need for Information Accounting Information 11 Information Must Be in Summary Form 12

Comparison of Financial and Managerial Accounting Differences between Financial and Managerial Accounting Similarities between Financial and Managerial Accounting Expanding Role of Managerial Accounting 15 Increased Needs for Information 15 The Certified Management Accountant (CMA) 17 Summary 17 Key Terms for Review 18 Questions 19 Problems 20

#### **PART I**

### THE FOUNDATION Cost Terms, Cost Behavior, and Systems Design

#### 2 Cost Terms, Concepts, and Classifications

General Cost Classifications 2:

Manufacturing Costs 25

Nonmanufacturing Costs 27

Period Costs 28

Product Costs 29

Cost Classifications on Financial Statements 29

The Income Statement 30

The Balance Sheet 31
Product Costs—A Closer Look 31
Just-In-Time (JIT) Inventory
Systems 35
The JIT Concept 35
Key Elements in a JIT System 36
Benefits of a JIT System 37
Expansion of the JIT Concept 37

xiii

Flexible Manufacturing Systems and JIT 38  Costs for Planning, Control, and Decision Making 39  Variable and Fixed Costs 39  Direct and Indirect Costs 41  Controllable and Noncontrollable Costs 42  Differential Costs 42  Opportunity Costs 43	Sunk Costs 44 Summary 44 Review Problem on Cost Terms 45 Key Terms for Review 46 Appendix Further Classification of Labor Costs 47 Questions 49 Exercises 50 Problems 53 Cases 61
3 Systems Design: Job-Order Costing	64
The Need for Unit Cost Data 65 Types of Costing Systems 66 Process Costing 66 Job-Order Costing 66 Summary of Costing Methods 67 Job-Order Costing—An Overview 67 Measuring Direct Materials Cost 67 Job Cost Sheet 68 Measuring Direct Labor Cost 69 Application of Manufacturing Overhead 70 What Drives Overhead Cost? 72 Computation of Unit Costs 73 Summary of Document Flows 73 Job-Order Costing—The Flow of Costs 73 The Purchase and Issue of Materials 75 Labor Cost 76 Manufacturing Overhead Costs 77 The Application of Manufacturing Overhead 78 Nonmanufacturing Costs 80 Cost of Goods Manufactured 81 Cost of Goods Sold 82 Summary of Cost Flows 82 Problems of Overhead Application 85	The Concept of Underapplied and Overapplied Overhead 85 Disposition of Under- or Overapplied Overhead Balances 86 A General Model of Product Cost Flows 88 Job-Order Costing in Service Companies 88 Activity-Based Costing 90 Level One: Plantwide Overhead Rate 90 Level Two: Departmental Overhead Rates 91 Level Three: Activity-Based Costing 91 An Example of Activity-Based Costing 92 Summary of Activity-Based Costing 95 The Impact of JIT Inventory Methods 95 Summary 96 Key Terms for Review 96 Appendix Cost Flows in a JIT System 97 Key Terms for Review (Appendix) 99 Questions 100 Exercises 101 Problems 106 Cases 122
4 Systems Design: Process Costing	127
Comparison of Job-Order and Process Costing 128 Similarities between Job-Order and Process Costing 128 Differences between Job-Order and Process Costing 129 A Perspective of Process Cost Flows 129	Processing Departments 129 The Flow of Materials, Labor, and Overhead Costs 130 Equivalent Units of Production 131 Weighted-Average Method 133 FIFO Method 134 Comparison of the Weighted-Average

CONTENTS

Visual Perspective of Equivalent	A Comparison of Production Report	
Units 136	Content 145	
Production Report—	Evaluation of the Weighted-Average	
Weighted-Average Method 136	and FIFO Methods 145	
Step 1: Prepare a Quantity Schedule	A Comparison of Costing	
and Compute the Equivalent	Methods 146	
Units 138	JIT Inventory Methods and Process	
Step 2: Compute the Unit	Costing 146	
Costs 139	Innovations in Costing Systems 148	
Step 3: Prepare a Cost	Operation Costing 148	
Reconciliation 139	Flexible Manufacturing	
Production Report—FIFO	Systems 149	
Method 142	Summary 149	
Step 1: Prepare a Quantity Schedule	Key Terms for Review 150	
and Compute the Equivalent	Questions 151	
Units 142	Exercises 152	
Step 2: Compute the Unit	Problems 155	
Costs 143	Cases 163	
Step 3: Prepare a Cost		
Reconciliation 143		

#### 5 Cost Behavior: Analysis and Use

Types of Cost Behavior Patterns 165 Variable Costs 165 True Variable versus Step-Variable Costs 167 The Linearity Assumption and the Relevant Range Fixed Costs 170 The Trend toward Fixed Costs 171 Types of Fixed Costs 171 Fixed Costs and the Relevant Range 173 Mixed Costs 174 The Analysis of Mixed Costs 175 The High-Low Method 176 The Scattergraph Method The Least-Squares Method The Use of Judgment in Cost Analysis 183

Multiple Regression Analysis 183 Engineering Approach to Cost Study 183 The Contribution Format Why a New Income Statement Format? 184 The Contribution Approach 185 Summary 185 Review Problem on Cost Behavior 186 Key Terms for Review 187 Appendix Alternative Approach to Least Squares 188 Questions 189 Exercises 190 **Problems** 193 Cases 200

164

206

#### **PART II**

### THE CENTRAL THEME Planning and Control

#### 6 Cost-Volume-Profit Relationships

The Basics of Cost-Volume-Profit (CVP) Analysis 207 Contribution Margin 207 Contribution Margin Ratio (CM Ratio) 209

Cost Structure 210
Operating Leverage 212
Some Applications of CVP
Concepts 213

Importance of the Contribution Margin 217 Break-Even Analysis 218 **Break-Even Computations** 218 CVP Relationships in Graphic Form 219 Target Net Profit Analysis The Margin of Safety (MS) Automation and CVP Analysis 226 Structuring Sales Commissions The Concept of Sales Mix The Definition of Sales Mix

Sales Mix and Break-Even Analysis 228 Sales Mix and per Unit Contribution Margin 230 Limiting Assumptions in CVP Analysis 230 Summary 231 Key Terms for Review 231 Questions 232 Exercises 233 Problems 236 Cases 248

#### 7 Segmented Reporting and the Contribution Approach to Costing

252

Segmented Reporting 253 Differing Levels of Segmented Statements 254 Assigning Costs to Segments 254 Sales and Contribution Margin The Importance of Fixed Costs Traceable and Common Fixed Costs 256 Identifying Traceable Fixed Costs 257 Traceable Costs Can Become Common Costs 257 Segment Margin Breakdown of Traceable Fixed Costs 260 Common Fixed Costs Varying Breakdowns of Total Sales 261 Sales Segmented by Products and Territories 261 Inventory Valuation under the Contribution Approach—Direct Costing 264 Direct Costing **Absorption Costing** Unit Cost Computations 265

The Controversy over Fixed Overhead Cost 267 Comparison of Absorption and Direct Costing 267 The Definition of an Asset Extended Comparison of Income Data 271 Sales Constant, Production Fluctuates 273 CVP Analysis and Absorption Costing 275 External Reporting and Income Taxes 276 Advantages of the Contribution Approach 276 Impact of JIT Inventory Methods 277 Summary 278 Review Problem on Absorption and Direct Costing 278 Key Terms for Review 280 Questions 280 Exercises 281 **Problems** 286 Cases 301

#### 8 Profit Planning

304

The Basic Framework of Budgeting Definition of Budgeting 305 Personal Budgets 305 Difference between Planning and Control 306 Advantages of Budgeting 306 Responsibility Accounting 307 Choosing a Budget Period 308 The Self-Imposed Budget 308

The Matter of Human
Relations 310
The Budget Committee 311
The Master Budget—A Network of
Interrelationships 311
Sales Forecasting—A Critical
Step 312
Preparing the Master Budget 313
The Sales Budget 313
The Production Budget 314

CONTENTS

Inventory Purchases—Merchandising

Expanding the Budgeted Income

Statement 323 Firm 315 JIT Purchasing 324 The Direct Materials Budget 315 Zero-Base Budgeting 326 The Direct Labor Budget 317 The Manufacturing Overhead The Need for Further Budgeting Budget 317 Material 327 **Ending Finished Goods Inventory** Key Terms for Review 327 Appendix Economic Order Quantity Budget 318 and the Reorder Point 328 The Selling and Administrative Expense Budget 318 Key Terms for Review The Cash Budget (Appendix) 335 The Budgeted Income Questions 335 Statement 320 Exercises 336 The Budgeted Balance Sheet **Problems** 339 Cases 354 Standard Costs and JIT/FMS Performance Measures 359 Standard Costs—Management by Overhead Variances—A Closer Exception 360 Look 372 Who Uses Standard Costs? 360 Variance Analysis and Management by Setting Standard Costs Exception 373 Ideal versus Practical Performance Measures in an Standards 361 Automated Environment 375 Setting Direct Materials Standard Costs and Standards 362 Automation 375 Setting Direct Labor Standards 363 New Performance Measures 375 Setting Variable Overhead **Ouality Control Measures** 377 Standards 364 Material Control Measures 377 Are Standards the Same as **Inventory Control Measures** Budgets? 364 Machine Performance A General Model for Variance Measures 378 Analysis 364 **Delivery Performance** Price and Quantity Variances 365 Measures 378 Using Standard Costs—Direct Use in a Nonautomated Material Variances 366 Environment 380 Materials Price Variance—A Closer Summary 381 Look 366 Review Problem on Standard Materials Quantity Variance—A Costs 382 Closer Look 368 Key Terms for Review 383 Using Standard Costs—Direct Labor Appendix General Ledger Entries to Variances 369 Record Variances 385 Labor Rate Variance—A Closer Ouestions 386 Look 370 Exercises 387 Labor Efficiency Variance—A Problems 391 Closer Look 371 Cases 404

#### 10 Flexible Budgets and Overhead Analysis

Flexible Budgets 409 Characteristics of a Flexible Budget 409

Using Standard Costs—Variable
Overhead Variances 371

Deficiencies of the Static Budget 409 How the Flexible Budget Works 411

xviii CONTENTS

The Measure of Activity—A Critical The Budget Variance—A Closer Choice 413 Look 422 The Overhead Performance The Volume Variance—A Closer Report—A Closer Look 414 Look 423 The Problem of Budget Graphic Analysis of Fixed Overhead Allowances 414 Variances 424 Spending Variance Alone Cautions in Fixed Overhead 415 Both Spending and Efficiency Analysis 425 Variances 416 Presentation of Variances on the Fixed Costs and the Flexible Income Statement 425 Budget 418 Review Problem on Overhead Fixed Overhead Analysis 419 Analysis 427 Flexible Budgets and Overhead Key Terms for Review 429 Rates 419 Questions 429 Overhead Application in a Standard Exercises 430 Cost System 421 Problems 434 The Fixed Overhead Variances 421 Cases 448

#### 11 Control of Decentralized Operations

Responsibility Accounting The Functioning of the System 452 The Flow of Information Expanding the Responsibility Accounting Idea The Benefits of Decentralization Investment, Profit, and Cost Centers 458 Measuring Management Performance 460 Rate of Return for Measuring Managerial Performance 460 The Return on Investment (ROI) Formula 461 Net Operating Income and Operating Assets Defined 462 Plant and Equipment: Net Book Value or Gross Cost? 463 Controlling the Rate of Return 464 Increase Sales 465 Reduce Expenses Reduce Operating Assets The Problem of Allocated Expenses and Assets 467 Criticisms of ROI 467 The Concept of Residual Income 468

Motivation and Residual Income 468 Divisional Comparison and Residual Income 469 Transfer Pricing 470 The Need for Transfer Prices 470 Transfer Prices at Cost 471 A General Formula for Computing Transfer Prices 473 Transfers at Market Price: General Considerations 474 Transfers at Market Price: Well-Defined Intermediate Market 475 Transfers at Market Price: Price Changes in the Intermediate Market 477 Transfers at Negotiated Market Price 479 Divisional Autonomy and Suboptimization Summary 480 Review Problem on Transfer Pricing 481 Key Terms for Review 483 **Ouestions** 484 Exercises 485 Problems 487 Cases 497

CONTENTS

#### PART III

### THE CAPSTONE Using Cost Data in Decision Making

#### 12 Pricing of Products and Services

The Economic Framework for

Pricing 505
Total Revenue and Total Cost

Curves 505

Marginal Revenue and Marginal Cost

Curves 507

Elasticity of Demand 508

Limitations of the General

Models 508

Pricing Standard Products 509

Cost-Plus Pricing Formulas 50

The Absorption Approach 510

The Contribution Approach 51

Determining the Markup

Percentage 513

Adjusting Prices to Market

Conditions 514

Why Use Cost Data in

Pricing? 516

Time and Material Pricing 517

Time Component 517

Material Component 517

An Example of Time and Material Pricing 517

Pricing 517

Pricing New Products 519

Test Marketing of Products

Pricing Strategies 519

Target Costs and Product

Pricing 520

Special Pricing Decisions 521

Pricing a Special Order 522

The Variable Pricing Model 524

Criticisms of the Contribution

Approach to Pricing 525

Approach to Theme 52

Price Discrimination 526

Summary 527 Key Terms for Review 528

Ouestions 529

Exercises 529

D 11 52

Problems 532 Cases 542

#### 13 Relevant Costs for Decision Making

Cost Concepts for Decision Making 544

Identifying Relevant Costs 544 Different Costs for Different

Purposes 545

Sunk Costs Are Not Relevant

Costs 545

Book Value of Old Equipment 545 Future Costs that Do Not Differ Are

Not Relevant Costs 547

An Example of Irrelevant Future

Costs 547

Why Isolate Relevant Costs? 548

Adding and Dropping Product

Lines 549

An Illustration of Cost

Analysis 550 A Comparative Format 552

Beware of Allocated Fixed Costs 552

The Make or Buy Decision 554

The Advantages of Integration 554
An Example of Make or Buy 555

The Matter of Opportunity

Cost 557

Utilization of Scarce Resources 557

Contribution in Relation to Scarce

Resources 558

The Problem of Multiple

Constraints 559

Joint Product Costs and the

Contribution Approach 559

The Pitfalls of Allocation 559

Sell or Process Further

Decisions 561

Summary 562

Key Terms for Review 562

Appendix Linear Programming 563

Ouestions 568

Exercises 569

Problems 574

Cases 589

543