

SOLUTIONS MANUAL
SOLVING ACCOUNTING
PRINCIPLES PROBLEMS
USING LOTUS 1-2-3 AND
EXCEL FOR WINDOWS

WEYGANDT • KIESO • KELL

ACCOUNTING PRINCIPLES

FOURTH EDITION



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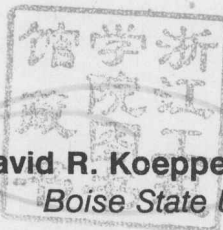


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SOLUTIONS MANUAL TO ACCOMPANY

**SOLVING ACCOUNTING PRINCIPLES PROBLEMS
USING LOTUS 1-2-3 and EXCEL FOR WINDOWS**

FOURTH EDITION



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NOT FOR SALE

Note to Instructors:

The following pages contain solutions to the exercises and problems in *Solving Principles of Accounting Problems Using Lotus 1-2-3 (or Excel), 4th Edition*. At the beginning of each chapter's solutions, we have provided a brief summary of the problem assignments. We have summarized the degree of difficulty of each problem from both an accounting and a computer standpoint. We hope this helps you select problems appropriate to your needs and to your students' needs and abilities.

This manual incorporates a number of partially completed problems and the unformatted problems taken from Weygandt, Kieso, and Kell *Accounting Principles, 4th Edition*. The manual follows the order of topics presented in the accounting principles sequence. Within each chapter, the materials are organized sequentially from the simplest computer applications to the most difficult.

Parts A, B, and C (or D, as appropriate) of the Introduction provide an *introduction* to computers, the disk operating system, and either Lotus 1-2-3, Excel, or Lotus 1-2-3 for Windows, respectively. We encourage everyone to read or review these chapters. Chapters 1-27, contain a variety of computer applications related to the accounting topics covered in each chapter. Applications are of four distinct types:

Preprogrammed Templates

The student manual contains nine preprogrammed worksheets for which the student must *identify* and enter the relevant input data *and* evaluate and interpret the output data generated by the worksheet. Generally, the formats of these worksheets correspond with what the student would be expected to complete manually or to see in his/her textbook. These worksheets are designed to test primarily accounting skills and require little or no programming skill.

For each worksheet, the student manual contains an example problem illustrating how to use the worksheet. Each template has three additional problems for students to solve using the worksheet. Students must change the input data and/or interpret and explain the results. These assignments utilize the computer's speed in recalculating after a change is made in the data. These worksheets are on the instructor's disk accompanying this manual, and hardcopy solutions to the problems are presented in this manual.

Tutorials

There are three tutorials in the student manual. They are designed to help students learn sufficient programming skills to prepare their own worksheets. Students should then be able to begin building worksheets to solve other accounting problems. The tutorials are very basic and, while illustrating the use of different formulas, formats, and commands, are generally very similar in nature. Each tutorial should take the average student less than one hour to complete. The tutorials are designed to be self-contained, thus minimizing the time commitment by you, the instructor. Since the remaining storage space on the disk(s) accompanying the student manual is limited, students should be encouraged to prepare a formatted data disk on which to save their completed tutorials.

Following each tutorial are three problems that may be assigned to students. These problems require students to use their completed worksheets to quickly recalculate their solutions based on new data. Solutions to the tutorials are on the instructor's disk accompanying this manual, and hardcopy solutions to the problems are presented in the manual.

For tutorial assignments, you will need to tell students what materials to submit for credit/evaluation. The simplest submission would be a printout of the values in the completed template and/or problem assignment. You may also ask for a printout of the cell formulas (very desirable if an error has been made) or a disk containing the completed tutorial.

Partially Completed Textbook Problems

Each chapter contains a selection of problems developed from *Accounting Principles, 4th Edition*. For each of these exercises and problems, a partially completed worksheet is provided for students to finish. Students should be encouraged to prepare a formatted data disk to use in saving their completed worksheets. Once the worksheet is completed, students are asked to use or modify their worksheets to answer several "what-if" questions. These problems test both accounting knowledge and computer skills--*These problems should not be assigned to students until they have a basic working knowledge of Lotus 1-2-3 or Excel!*--equivalent to one of the three tutorials in the manual.

Most of the formatting for these problems is already done for students and they need only enter the appropriate numbers, cell references and formulas, or text in those cells containing NNNNNN's, *****, or LLLLLL's, respectively. In general, less is expected of the student to complete the worksheets in the earlier chapters of the manual. Progressively more work is required of the student to complete the worksheets in later chapters. Solutions to the partially completed worksheets are on the instructor's disk accompanying this manual, and hardcopy solutions to the problems are presented in the manual.

Unformatted Textbook Problems

Most chapters also contain a problem adapted from *Accounting Principles, 4th Edition* that asks students to prepare a worksheet from scratch and use or modify that worksheet to answer several "what-if" questions. These problems are also designed to test accounting knowledge, but require increased computer skills--*These problems should not be assigned to students until they have a good working knowledge of Lotus 1-2-3 or Excel!* Again, students should be encouraged to prepare a formatted data disk to use in saving their completed worksheets. Hardcopy solutions to these problems are presented in this manual.

SAMPLE SYLLABI

The number of computer applications to incorporate into your syllabus for Accounting Principles depends on the amount of exposure to computers you believe your students should obtain and the amount of computer time available to your students.

The sample syllabi attempt to address differences in instructor preferences by illustrating "light," "medium," and "heavy" intensity syllabi. "Light" is defined as ten hours of computer time over a thirty-week school-year, or approximately one hour of computer time every three weeks. "Medium" is defined as twenty hours of computer time per school-year, or approximately two hours of computer time every three weeks. Finally, "heavy" is defined as thirty hours of computer time, or one hour every week of the school-year. It should also be possible to change from one syllabus to another. For example, you might begin with a "light" schedule and then switch to a "medium" or "heavy" schedule as the school-year progresses.

We have assumed in preparing the sample syllabi that your students have little or no familiarity with computers and electronic spreadsheets. For students who are already familiar with these tools, you may need to adjust the suggested assignments. We have assigned several of the tutorial chapters early in the school-year. This will enable you to make assignments from the partially completed and unformatted textbook problems earlier than you might otherwise be able to. You may wish to have your students read or review the related sections of their textbook before they attempt to complete the tutorials.

We have also assumed your syllabus follows the chapters of *Accounting Principles, 4th Edition* and covers each chapter in approximately one week. If your syllabus does not follow this sequence, you may need to adjust the sample syllabi to correspond with your topic coverage.

Numbers in the syllabi refer to chapters of the student manual. For example, "A, B, & C" refers to the Introduction, Parts A, B, and C of the student manual; "8A-1" refers to Chapter 8, problem A-1. Exercises and problems adapted from *Accounting Principles, 4th Edition* are designated using the notations from the text. For example, P2-4A is Problem 2-4A from the text.

COMMON PROBLEMS AND LIKELY SOLUTIONS

Loading the Templates

Problem: *Menu does not appear on the screen.*

Most likely causes:

Lotus not configured for the data drive being used.

Solution:

Move to a computer with the correct data drive (or change the configuration). Most common error is using Lotus or Excel configured to read a hard drive (C:) with the disk in the A: drive.

Using wrong data disk.

Make sure the data disk is being used with the appropriate spreadsheet (Lotus, Excel, or Lotus for Windows).

Using the Spreadsheet

Problem: *Template does not give correct answer after new data is entered.*

Most likely causes:

Spreadsheet is in manual recalculation mode.

Solution:

Press <F9> to recalculate.

User has made unintended changes in the spreadsheet.

Erase current spreadsheet, reload spreadsheet from the data disk, and reenter data. (Students are encouraged to make changes in spreadsheets, but they should be aware that they may need to reload the spreadsheet when starting a new problem.)

Input entered in wrong cell; not all inputs entered.

Check amounts and cells in which inputs have been made.

Circular reference made in entering formulas.

Check logical flow of calculations.

Printing the Spreadsheet

Problem: *Spreadsheet will not print.*

Most likely causes:

Printer not turned on.

Solution:

Turn printer on.

Printer out of paper.

Load paper in printer.

Printer cable connection loose.

Check cable connections.

Printer not on-line.

Especially when networked, check to make sure the printer correctly specifies that the computer is on-line.

Print range incorrectly specified.

Check to be sure the print range is correctly specified.

INTRODUCTION--PART A COMPUTERS AND ACCOUNTING

Part A provides an introduction to the development of computers, the basic components of computer hardware, and instructions for handling computer disks. The chapter does not require the use of a computer, but being able to see a computer (especially the keyboard) will be useful.

Estimated time to complete: 20-30 minutes.

INTRODUCTION--PART B The Disk Operating System (DOS)

This chapter is interactive and requires the use of a computer. The chapter provides instructions on:

- Understanding and starting DOS.
- Disk drives.
- Formatting disks.
- Copying disks--making a backup.
- Discovering what's on a disk.
- Changing directories.
- Creating a subdirectory.
- Filenames and copying individual files.
- Copying groups of files.
- Deleting files.
- Getting help.

Estimated time to complete: 30-60 minutes.

INTRODUCTION--PART C Lotus 1-2-3 (for DOS) or Excel

This chapter is interactive and requires the use of a computer. The chapter provides instructions on:

- Starting Lotus 1-2-3 or Excel.
- Obtaining help using Lotus 1-2-3 or Excel.
- Moving about the worksheet.
- Entering text and correcting typing errors.
- Beginning to use the "slash" commands.
- Retrieving and saving worksheets.
- Printing worksheet values and formulas.
- Exiting from Lotus 1-2-3 or Excel.

Estimated time to complete: 30-60 minutes.

INTRODUCTION--PART D

Lotus 1-2-3 for Windows

This chapter is interactive and requires the use of a computer. The chapter provides instructions on:

- Starting Lotus 1-2-3 for Windows.
- Obtaining help using Lotus 1-2-3 for Windows.
- Moving about the worksheet.
- Entering text and correcting typing errors.
- Beginning to use the menu commands.
- Retrieving and saving files.
- Printing worksheet values and formulas.
- Exiting from Lotus 1-2-3 for Windows.

Estimated time to complete: 30-60 minutes.

WEEKS 1-15

Intensity: Computer time:	Light (10 hours/year)	Medium (20 hours/year)	Heavy (30 hours/year)
Week 1	--	--	A, B, & C (or D)
Week 2	A, B, & C (or D)	A, B, & C (or D)	8A-1 (or 8B-1)
Week 3	--	8A-1 (or 8B-1)	P2-4A
Week 4	--	P4-1	P4-1
Week 5	8A-1 (or 8B-1)	--	P5-5
Week 6	--	E6-3	E6-3
Week 7	E7-9	--	E7-9
Week 8	--	P8-3	P8-3
Week 9	9B-2 (or 9C-2)	9B-2 (or 9C-2)	9B-2 (or 9C-2)
Week 10	--	--	10A-3
Week 11	--	P11-2	P11-2
Week 12	E12-5	E12-5	E12-5
Week 13	E13-2	E13-2	13A-2
Week 14	--	--	P14-5
Week 15	P15-5	P15-5	P15-5

WEEKS 16-30

Intensity: Computer time:	Light (10 hours/year)	Medium (20 hours/year)	Heavy (30 hours/year)
Week 16		16A-1	16A-1
Week 17	E17-6	E17-6	E17-6
Week 18	--	--	P18-5
Week 19	19A-2	19A-2	19A-2
Week 20	--	--	P19-5
Week 21	--	P20-4	P20-4
Week 22	22A-3	22A-3	22A-3
Week 23	--	--	23A-2
Week 24	E24-4	E24-8	E24-8
Week 25	--	25A-2	25A-2
Week 26	--	--	26A-1
Week 27	E27-2	E27-2	E27-2
Week 28	--	--	--
Week 29	P27-4A	P27-4A	P27-4A
Week 30	--	--	10B-1

CONTENTS

List of Tutorials

List of Preprogrammed Templates

Note to Instructors

Sample Syllabi

Common Problems and Likely Solutions

Introduction

Part A. Computers and Accounting

Part B. The Disk Operating System (DOS)

Part C. Lotus 1-2-3 (for DOS) or Excel

Part D. Lotus 1-2-3 for Windows

Chapter 1 Accounting In Action

Chapter 2 The Recording Process

Chapter 3 Adjusting the Accounts

Chapter 4 Completion of the Accounting Cycle

Chapter 5 Accounting for Merchandising Operations

Chapter 6 Accounting Information Systems

Chapter 7 Internal Control and Cash

Chapter 8 Accounting for Receivables

Chapter 9 Inventories

Chapter 10 Plant Assets, Natural Resources, and Intangible Assets

Chapter 11 Current Liabilities and Payroll Accounting

Chapter 12 Accounting Principles

Chapter 13 Accounting for Partnerships

Chapter 14 Corporations: Organization and Capital Stock Transactions

Chapter 15 Corporations: Dividends, Retained Earnings, and Income Reporting

Chapter 16 Long-Term Liabilities

Chapter 17 Investments

Chapter 18 The Statement of Cash Flows

Chapter 19 Financial Statement Analysis

Chapter 20 Managerial Accounting

Chapter 21 Job Order Cost Accounting

Chapter 22 Process Cost Accounting

Chapter 23 Cost-Volume-Profit Relationships

Chapter 24	Budgetary Planning
Chapter 25	Budgetary Control and Responsibility Accounting
Chapter 26	Performance Evaluation Through Standard Costs
Chapter 27	Incremental Analysis and Capital Budgeting

TUTORIALS

Chapter 8	Allowance for Doubtful Accounts
Chapter 9	Lower of Cost or Market
Chapter 10	Lump-sum Purchase of Fixed Assets

PREPROGRAMMED TEMPLATES

Chapter 9	Inventory Methods
Chapter 10	Depreciation Methods
Chapter 13	Partnership Income Distributions
Chapter 16	Bonds Payable
Chapter 19	Financial Statement Analysis
Chapter 22	Process Cost Accounting
Chapter 23	Cost-Volume-Profit Analysis
Chapter 25	Flexible Budgeting
Chapter 26	Standard Costs

CHAPTER 1

ACCOUNTING IN ACTION

A. Partially Completed Textbook Problems

P1-1

Accounting difficulty: *Simple*

Computer difficulty: *Elementary/intermediate*

Estimated time to complete: *30 minutes*

Assignment: Prepare a tabular analysis of ten transactions and determine the net income or net loss for one month. Students enter the amounts of the transactions and compute totals. Two revisions of the tabular analysis are prepared after changing the amounts of two transactions.

P1-2

Accounting difficulty: *Moderate*

Computer difficulty: *Elementary/intermediate*

Estimated time to complete: *30-60 minutes*

Assignment: Prepare a tabular analysis of eight transactions from beginning balances and determine the net income or net loss for one month. Prepare an income statement, owner's equity statement, and balance sheet. Students enter the amounts of the transactions and compute totals. Two revisions of the analysis and statements are prepared after changing the amounts of two transactions.

P1-1A

Accounting difficulty: *Simple*

Computer difficulty: *Elementary/intermediate*

Estimated time to complete: *30 minutes*

Assignment: Prepare a tabular analysis of eleven transactions and determine the net income or net loss for one month. Students enter the amounts of the transactions and compute totals. Two revisions of the tabular analysis are prepared after changing the amounts of two transactions.

B. Unformatted Textbook Problem

E1-11

Accounting difficulty: *Simple*

Computer difficulty: *Elementary/intermediate*

Estimated time to complete: *15 minutes*

Assignment: Prepare an income statement. Two revisions of the income statement are prepared after discovering several errors in the original information.

(a)

SEALL TRAVEL AGENCY

	Cash	+	Accounts Receiv.	+	Suppl.	+	Office Equip- ment	=	Accounts Pay.	+	Laura Seall, Capital	Explan.
1.	\$20,000										\$20,000	Investment
	20,000	+		+		+		=		+	20,000	
2.	(400)										(400)	Rent Expense
	19,600	+		+		+		=		+	19,600	
3.	(2,500)						2,500					Purchase Equipment
	17,100	+		+		+	2,500	=		+	19,600	
4.									300		(300)	Advertis. Expense
	17,100	+		+		+	2,500	=	300	+	19,300	
5.	(600)				600							Purchase Supplies
	16,500	+		+	600	+	2,500	=	300	+	19,300	
6.	1,000		8,000								9,000	Service Revenue
	17,500	+	8,000	+	600	+	2,500	=	300	+	28,300	
7.	(200)										(200)	Drawings
	17,300	+	8,000	+	600	+	2,500	=	300	+	28,100	
8.	(300)								(300)			Paid for Advertis.
	17,000	+	8,000	+	600	+	2,500	=	0	+	28,100	
9.	(1,200)										(1,200)	Salaries Expense
	15,800	+	8,000	+	600	+	2,500	=	0	+	26,900	
10.	8,000		(8,000)									Cash Collected
	<u>\$23,800</u>	+	<u>\$0</u>	+	<u>\$600</u>	+	<u>\$2,500</u>	=	<u>\$0</u>	+	<u>\$26,900</u>	

(b) Increase in capital
Add: Drawings

\$6,900
200

Net income

\$7,100

(c)

SEALL TRAVEL AGENCY

	Cash	Accounts + Receiv.	+ Suppl.	+ Office Equip- ment	= Accounts Pay.	+ Laura Seall, Capital	Explan.
1.	\$20,000					\$20,000	Investment
	20,000	+	+	+	=	+ 20,000	
2.	(400)					(400)	Rent Expense
	19,600	+	+	+	=	+ 19,600	
3.	(2,500)			2,500			Purchase Equipment
	17,100	+	+	+ 2,500	=	+ 19,600	
4.					300	(300)	Advertis. Expense
	17,100	+	+	+ 2,500	= 300	+ 19,300	
5.	(600)		600				Purchase Supplies
	16,500	+	+ 600	+ 2,500	= 300	+ 19,300	
6.	1,000	8,000				9,000	Service Revenue
	17,500	+ 8,000	+ 600	+ 2,500	= 300	+ 28,300	
7.	(800)					(800)	Drawings
	16,700	+ 8,000	+ 600	+ 2,500	= 300	+ 27,500	
8.	(300)				(300)		Paid for Advertis.
	16,400	+ 8,000	+ 600	+ 2,500	= 0	+ 27,500	
9.	(1,200)					(1,200)	Salaries Expense
	15,200	+ 8,000	+ 600	+ 2,500	= 0	+ 26,300	
10.	8,000	(8,000)					Cash Collected
	\$23,200	+ \$0	+ \$600	+ \$2,500	= \$0	+ \$26,300	

1. There is no change in net income.
2. Laura Seall, Capital, would be \$600 lower.

(d)

SEALL TRAVEL AGENCY

	Cash	+	Accounts Receiv.	+	Suppl.	+	Office Equip- ment	=	Accounts Pay.	+	Laura Seall, Capital	Explan.
1.	\$20,000										\$20,000	Investment
	20,000	+		+		+		=		+	20,000	
2.	(400)										(400)	Rent Expense
	19,600	+		+		+		=		+	19,600	
3.	(2,500)						2,500					Purchase Equipment
	17,100	+		+		+	2,500	=		+	19,600	
4.									300		(300)	Advertis. Expense
	17,100	+		+		+	2,500	=	300	+	19,300	
5.	(600)				600							Purchase Supplies
	16,500	+		+	600	+	2,500	=	300	+	19,300	
6.	1,000		8,000								9,000	Service Revenue
	17,500	+	8,000	+	600	+	2,500	=	300	+	28,300	
7.	(800)										(800)	Drawings
	16,700	+	8,000	+	600	+	2,500	=	300	+	27,500	
8.	(300)								(300)			Paid for Advertis.
	16,400	+	8,000	+	600	+	2,500	=	0	+	27,500	
9.	(900)										(900)	Salaries Expense
	15,500	+	8,000	+	600	+	2,500	=	0	+	26,600	
10.	8,000		(8,000)									Cash Collected
	\$23,500	+	\$0	+	\$600	+	\$2,500	=	\$0	+	\$26,600	

1. Net income would increase by \$300.

2. Laura Seall, Capital, would be \$300 higher.

(a)

IVAN IZO, ATTORNEY AT LAW

	Cash	Accounts + Receiv.	Suppl.	Office Equip- ment	=	Notes Pay.	Accounts + Pay.	Ivan Izo, Capital
Bal.	\$4,000	+ \$1,500	+ \$500	+ \$5,000	=		\$4,200	+ \$6,800
1.	1,400	(1,400)						
	5,400	+ 100	+ 500	+ 5,000	=		4,200	+ 6,800
2.	(2,700)						(2,700)	
	2,700	+ 100	+ 500	+ 5,000	=		1,500	+ 6,800
3.	3,000	3,400						6,400
	5,700	+ 3,500	+ 500	+ 5,000	=		1,500	+ 13,200
4.	(400)			1,000			600	
	5,300	+ 3,500	+ 500	+ 6,000	=		2,100	+ 13,200
5.	(1,500)							(1,500)
	(900)							(900)
	(350)							(350)
	2,550	+ 3,500	+ 500	+ 6,000	=		2,100	+ 10,450
6.	(550)							(550)
	2,000	+ 3,500	+ 500	+ 6,000	=		2,100	+ 9,900
7.	2,000					2,000		
	4,000	+ 3,500	+ 500	+ 6,000	=	2,000	+ 2,100	+ 9,900
8.							250	(250)
	4,000	+ 3,500	+ 500	+ 6,000	=	2,000	+ 2,350	+ 9,650