Excel® 2003 Just the Steps™ FOR DUMMIES®

by Diane Koers



Excel® 2003 Just the Steps™ FOR DUMMIES®

by Diane Koers



Excel[®] 2003 Just the Steps[™] For Dummies[®]

Published by Wiley Publishing, Inc. 111 River Street Hoboken, NJ 07030-5774 www.wiley.com

Copyright © 2006 by Wiley Publishing, Inc., Indianapolis, Indiana

Published by Wiley Publishing, Inc., Indianapolis, Indiana

Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Legal Department, Wiley Publishing, Inc., 10475 Crosspoint Blvd., Indianapolis, IN 46256, (317) 572-3447, fax (317) 572-4355, or online at http://www.wiley.com/go/permissions.

Trademarks: Wiley, the Wiley Publishing logo, For Dummies, the Dummies Man logo, A Reference for the Rest of Us!, The Dummies Way, Dummies Daily, The Fun and Easy Way, Dummies.com, Just the Steps, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates in the United States and other countries, and may not be used without written permission. Excel is a registered trademark of Microsoft Corporation in the United States and/or other countries. All other trademarks are the property of their respective owners. Wiley Publishing, Inc., is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WAR-RANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COM-PETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFOR-MATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 800-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002.

For technical support, please visit www.wiley.com/techsupport.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Control Number: 2005938248

ISBN-13: 978-0-7645-7488-7

ISBN-10: 0-7645-7488-4

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

1B/SU/QT/QW/IN



About the Author

Diane Koers owns and operates All Business Service, a software training and consulting business formed in 1988 that services the central Indiana area. Her area of expertise has long been in the word-processing, spreadsheet, and graphics area of computing as well as providing training and support for Peachtree Accounting Software. Diane's authoring experience includes over thirty books on topics such as PC Security, Microsoft Windows, Microsoft Office, Microsoft Works, WordPerfect, Paint Shop Pro, Lotus SmartSuite, Quicken, Microsoft Money, and Peachtree Accounting, many of which have been translated into other languages such as Dutch, Bulgarian, Spanish, and Greek. She has also developed and written numerous training manuals for her clients.

Diane and her husband enjoy spending their free time fishing, traveling, and playing with their four grandsons and Little Joe, their Yorkshire Terrier.

Dedication

To Daniel Scott, a very precious and long awaited addition to our family!

Author's Acknowledgments

I am deeply thankful to the many people at Wiley Publishing who worked on this book. Thank you for all the time you gave and for your assistance.

To Bob Woerner, for the opportunity to write this book and his confidence in me. A very special thank you to Pat O'Brien for his assistance (and patience) in the book development; to Rebecca Senninger for keeping me grammatically correct, and to Bill Moorehead for checking all the technical angles. And, last but certainly not least, a *big* thank you to Maridee Ennis and all those behind the scenes who helped this book become a reality. It's been an interesting experience.

Publisher's Acknowledgments

We're proud of this book; please send us your comments through our online registration form located at www.dummies.com/register/. Some of the people who helped bring this book to market include the following:

Acquisitions, Editorial, and Media Development Project Editor: Pat O'Brien Acquisitions Editor: Bob Woerner Copy Editor: Rebecca Senninger Technical Editor: Bill Moorehead Editorial Manager: Kevin Kirschner Media Development Manager: Laura VanWinkle Editorial Assistant: Amanda Foxworth Cartoons: Rich Tennant (www.the5thwave.com)

Composition Services Project Coordinator: Maridee Ennis Layout and Graphics: Denny Hager, Melanee Prendergast, Heather Ryan, Erin Zeltner Proofreaders: Leeann Harney, Betty Kish Indexer: Ty Koontz

Publishing and Editorial for Technology Dummies

Richard Swadley, Vice President and Executive Group Publisher Andy Cummings, Vice President and Publisher Mary Bednarek, Executive Acquisitions Director Mary C. Corder, Editorial Director Publishing for Consumer Dummies Diane Graves Steele, Vice President and Publisher Joyce Pepple, Acquisitions Director Composition Services Gerry Fahey, Vice President of Production Services Debbie Stailey, Director of Composition Services

Contents at a Glance

| Introduction | | |
|--------------|--|--|
|--------------|--|--|

| Chapter 1: Working with Excel Files | 5 |
|--------------------------------------|----|
| Chapter 2: Entering Spreadsheet Data | 13 |
| Chapter 3: Building Formulas | 21 |

Part 11: Sprucing Up Your Spreadsheet ... 31

| Chapter 4: Formatting Cells and Data | 3 |
|---------------------------------------|---|
| Chapter 5: Adding Color and Graphics4 | 3 |
| Chapter 6: Working with Workbooks | 3 |

Part 111: Viewing Data in Different Ways......65

| 11 7 | |
|---------------------------------------|---|
| Chapter 7: Changing Worksheet Views67 | 7 |
| Chapter 8: Sorting Data75 | 5 |
| Chapter 9: Creating Charts with Excel | 5 |
| Chapter 10: Printing Workbooks97 | 7 |

Part IV: Analyzing Data with Excel 107

| Chapter 11: Working with Outlines | 109 |
|--|-----|
| Chapter 12: Filtering Data | 117 |
| Chapter 13: Creating Pivot Tables | 127 |
| Chapter 14: Building Simple Macros | 139 |
| Chapter 15: Saving Time with Excel Tools | 145 |

Part V: Practical Applications for Excel......151

| Inder | 195 |
|--|-----|
| Chapter 21: Using Excel with Access | 185 |
| Chapter 20: Blending Excel and PowerPoint | 179 |
| Chapter 19: Integrating Excel into Word | 171 |
| Chapter 18: Planning for Your Financial Future | 167 |
| Chapter 17: Tracking Medical Expenses | 159 |
| Chapter 16: Creating a Commission Calculator | 153 |
| • | |

Welcome to the world of Microsoft Excel, the most popular and powerful spreadsheet program in the world. You may ask...what is a spreadsheet program? A spreadsheet is a computer program with a huge grid designed to display data in rows and columns where you can create calculations to perform mathematical, logical, and other types of operations on the data you enter. You can sort the data, enhance it, and manipulate it a plethora of ways including creating powerful charts and graphs from it. Whether you need a list of names and addresses, or a document to calculate next year's sales revenue based on prior years' performance, Excel is the application you want to use.

About This Book

This book provides the tools you need to successfully tackle the potentially overwhelming challenge of using Microsoft Excel. Through this book you find out how to create spreadsheets; however, what you create is totally up to you. Your imagination is the only limit!

Why You Need This Book

Time is of the essence and most of us don't have the time to do a lot of reading. We just need to get a task done, effectively and efficiently. This book is full of concise, easy to understand steps designed to get you quickly up and running with Excel by taking you directly to the steps for a desired task, without all the jibber-jabber that often accompanies other books.

How This Book Is Organized

This book is divided into eighteen different chapters broken into five convenient parts:

Part 1: Putting Excel to Work

In Chapter 1, you uncover the basics of working with Excel files, such as opening, closing, and saving files, while in Chapter 2, you work with entering the

Introduction

Conventions used in this book

- When you have to type something, I put it in **bold** type.
- → For menu commands, I use the Symbol to separate menu items. For example, choose File Open. The Symbol is just my way of saying "Choose Open from the File menu."



This icon points out insights or helpful suggestions related to the tasks in the step list.

different types of data into Excel worksheets, and in Chapter 3, you create various types of formulas and functions to perform worksheet calculations.

Part 11: Sprucing Up Your Spreadsheet

Chapter 4 shows you how to dress up the data you enter into a worksheet, including data alignment, formatting values, changing fonts, colors, and cell borders. In Chapter 5, you also work with graphics such as arrows and clip art. Then in Chapter 6, you work with multiple worksheets, hyperlinks and worksheet protection, and passwords.

Part 111: Viewing Data in Different Ways

This part shows how you modify how Excel displays certain workbook options on your screen. Chapter 7 illustrates changing the worksheet views. In Chapter 8, you sort your data making it easier to locate particular pieces of information. In Chapter 9, you create charts to display your data in a superb graphic manner and in Chapter 10 you work with the different output methods, including printing, for your worksheets.

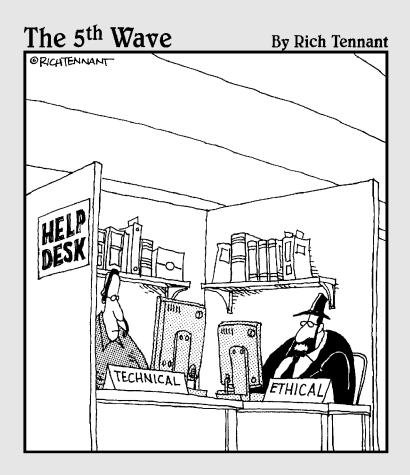
Part 1V: Analyzing Data with Excel

Use these chapters to effectively analyze all the data you input into a worksheet. In Chapters 11, 12, and 13, you work with Excel Outlines, Filters, and Pivot Tables. Chapters 14 and 15 show some of the timesaving data entry tools included with Excel.

Part V: Practical Applications for Excel

Go to these chapters to save yourself time with a commission calculation worksheet (Chapter 16), a medical expense tracking worksheet (Chapter 17), and Chapter 18 which helps you plan for your future by planning to purchase a house, pay off a credit card balance, and save for college or retirement. Chapters 19 through 21 show how you can use Excel with the other Office programs — Word, Powerpoint, and Access.

Part I Putting Excel to Work



| Chapter 1: Working with Excel Files | 5 |
|---|----|
| Open and Close Excel | 6 |
| Create a New Excel File | 7 |
| Save a Workbook | |
| Open an Existing Excel File | |
| Delete an Existing Excel File | |
| Use the Office Assistant | |
| Separate the Excel Toolbars | 10 |
| Display Different Toolbars | 10 |
| Specify Workbook Properties | |
| Search for a File by Properties | 12 |
| Save or Open Files in Different Formats | |
| Chapter 2: Entering Spreadsheet Data | 13 |
| Change the Active Cell | 14 |
| Enter Data | |
| Undo Data Entry | |
| Edit or Delete Cell Data | |
| Select Multiple Cells | |
| • | |

. .

| Copy and Paste Data | 18 |
|--|----|
| Name a Range of Cells | 18 |
| Extend a Series with AutoFill | |
| Locate Cells with Data Validation | |
| Validate Data Entry | 20 |
| hapter 3: Building Formulas | 21 |
| Create Simple Formulas with Operators | 22 |
| Create Compound Formulas | 23 |
| Add Numbers with AutoSum | |
| Find an Average Value | 24 |
| Copy Formulas with AutoFill | |
| Edit a Formula | |
| Define an Absolute Formula | |
| Copy Values Using Paste Special | 26 |
| Build a Formula with the Function Wizard | |
| Generate an IF Statement Formula | |
| Troubleshoot Formula Errors | |
| Audit Formulas | |
| | |

Working with Excel Files

Your PC probably has many different computer programs loaded on it, but you'll not likely find one that is as versatile as Microsoft Excel. Throughout the course of this book, you discover methods to use Excel as a spreadsheet of course, but also as a database, a calculator, a planner, and even a graphic illustrator. But as with most things in life, you need to figure out the basics before you can carry out the more advanced actions.

In this chapter, you

- Discover the fundamental measures needed when working with Excel files; basic operations to file management such as opening, closing, and saving files.
- Meet Clippit, the animated Office Assistant, who stands by your virtual screen waiting for a question from you. Clippit takes your question to the Excel Help system, both local and over the Internet, searching to provide the best answer to your inquiry.
- Customize what you see on the Excel screen, thereby making it easier and faster for you to use.
- Use workbook properties to better manage your files and provide a means to search for those files that sometimes mysteriously get lost in a computer hierarchy.

Chapter

Get ready to. . .

| → Open and Close Excel6 |
|---|
| ···→ Create a New Excel File7 |
| ···→ Save a Workbook7 |
| → Open an Existing Excel File8 |
| → Delete an Existing Excel File8 |
| → Use the Office Assistant9 |
| → Separate the Excel Toolbars10 |
| > Display Different Toolbars10 |
| |
| Search for a File by Properties12 |
| \rightarrow Save or Open Files in Different Formats12 |

Open and Close Excel

- To open Excel, choose Start⇒All Programs⇒Microsoft Office⇒Microsoft Excel. The Microsoft Excel program begins with a new blank workbook, as shown in Figure 1-1, ready for you to enter data. Take note of the following elements on-screen:
 - Getting Started task pane: Appears on the right side on the workbook.
 - Office Assistant: An animated icon that can answer questions, offer tips, and provide help. See the "Use the Office Assistant" section later in this chapter.
 - Toolbars: A series of tools that provide fast access to commonly used Excel features. By default, Excel includes nineteen toolbars but only three display when you start Excel: Standard, Formatting, and Drawing. See "Separate the Toolbars" and "Display Different Toolbars" later in this chapter.



If you have an Excel icon on your Windows desktop, double-click the icon for a quick way to start Excel.

2. To close the current workbook, choose File Close. If any changes are not saved, Excel prompts you to save your changes. See "Save a Workbook" later in this chapter.



Optionally, click the Close box to close the current Excel file. If no other workbook is open, the Excel program also closes.

3. To exit Excel, choose File=>Exit as shown in Figure 1-2. The Excel file and program closes. If any changes are not saved, Excel prompts you to save your changes.

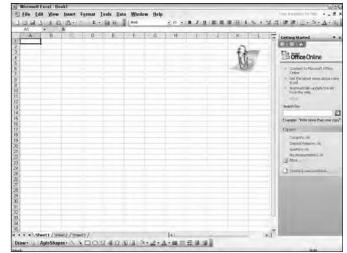


Figure 1-1: A blank Excel workbook that Excel calls Book1

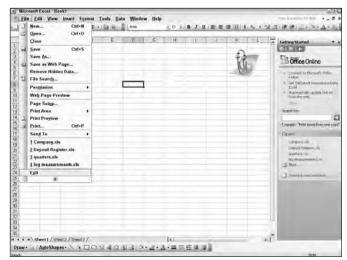


Figure 1-2: Closing Excel releases the program from your computer memory

Create a New Excel File

1. Choose File New. The New Workbook options appear on the task pane.



Optionally, press $\mathsf{Ctrl}+\mathsf{N}$ or click the New button on the toolbar to create a new blank workbook.

2. From the task pane, click Blank Workbook. A new workbook (see Figure 1-3) appears on top of the existing workbook.

Save a Workbook

1. Choose File Save or click the Save button on the toolbar. The Save As dialog box appears, as shown in Figure 1-4.



Optionally, press Ctrl+S to save the Excel file.

- **2.** By default, Excel saves your files in the My Documents folder. If you want to save your file in a different folder, select the folder where you want to save the file from the Save In drop-down list.
- **3.** In the File Name text box, type a descriptive name for the file.



Filenames cannot contain an asterisk, slash, backslash, or the question mark character.

4. Click the Save button. Excel saves the workbook in the location and with the name you specified.

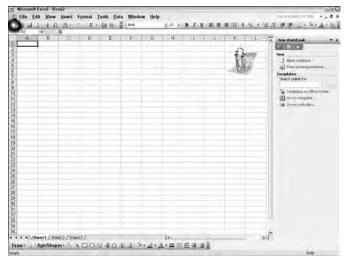


Figure 1-3: Excel calls each new workbook by the next increment

| Sava As | | | | | | | | | 1 |
|--|-----------------------------------|----------------|--------------------|---------------|-------------------|--------------------|-------------|--------------------------|--------------|
| Sove in | Hy Dokon | perids. | | | | | 1214 | ·12. | Table 🕂 👘 |
| My Access Documents | Dane. | Dare Ba | U HSNMas 904 | My Alama | () Ny Sections | My-Gata Sources | My oBooks | M. Gening Card Terrin | My Magazines |
| Devilian | Ø My Masic | My Natabacia |) My Pictures | My PSI's Pies | Hy ISP PA | J My Puzzles | My Received | My History | My Webs |
| Hy Economics Hy Competer Hy Competer | HSP-Inte Concord-Ry | E (B) | R R | Evals | Gif ad Rite | | PROCULETS | | |
| | File Galants Solver its System | Recenterat bud | | ok | | | | 1 | Sam. |

Figure 1-4: The Excel Save As dialog box

Open an Existing Excel File

1. With Excel already open, choose File⇔Open or click the Open button on the toolbar. The Open dialog box opens, as shown in Figure 1-5.



0

Optionally, press Ctrl+O to display the Open dialog box.

At the bottom of the File menu, Excel stores the names of the last four Excel files you opened. Click any listed filename to quickly open the selected file.

- **2.** By default, Excel looks for your files in the My Documents folder. If your file is not in My Documents, select the appropriate folder from the Look In drop-down list.
- 3. Select the file you want to open.
- 4. Click the Open button. Excel opens the file.

Delete an Existing Excel File

- 1. With Excel open, choose File⇔Open or click the Open button on the toolbar. The Open dialog box displays.
- **2.** Right-click the file you want to delete. Do not open the file.
- **3.** Choose Delete from the shortcut menu (see Figure 1-6). A confirmation message appears.
- 4. Click Yes. Excel deletes the file.
- 5. Click the Cancel button to close the Open dialog box.



Figure 1-5: Use the Open dialog box to locate a previously saved Excel file

| 13 | Öpen | | | | | E.J. | ~~~~ |
|--|--|--|---|------------|---|---------|------|
| A | fourier | My Documents | | A COMPANY | - g · a & | Sends - | 0 |
| 7 3 4 4 5 6 7 8 8 10 11 12 10 14 15 16 17 19 10 10 11 12 12 13 14 15 | Hy Recet December LinkSop Hy December Hy Consume Hy Introd House | Art T Art T | And Part Hass And Par | Thirtyerte | Now Polw Convert2PDF Open With | | |
| 26 17 | 1.000 | File (Lanet) | | | × | 100 - | |
| 8 | | Plies of Cype: 48 Merchart Ciffer | EXAMPLE: | | 1 | Carel | |

Figure 1-6: Delete unwanted files through the Open dialog box.

Use the Office Assistant

1. Click anywhere on the Office Assistant icon. The Office Assistant displays a What Would You Like to Do text box.



Want to see your Office Assistant do tricks? Right-click the assistant and select Animate. Each different Office Assistant performs a different series of tricks.

- **2.** Type a request in the text box, as shown in Figure 1-7. Then, press Enter.
- **3.** The results of your request appear in a Search Results task pane on the right side of your screen (see Figure 1-8). Click any link in the Search Results task pane to discover the answer to your request.
- **4.** Optionally, drag the Office Assistant to a different part of your screen if it's in your way. In many cases, the Office Assistant moves out of the way automatically.



Right-click the Office Assistant and select Choose Assistant, which displays the Office Assistant dialog box. From the Gallery tab, you can select a different assistant than the default paper clip. Options include a robot, a magician, a cat, a dog, and others.

- *5.* Click the Close box in the upper-right corner of the Search Results task pane to put it away.
- **6.** Right-click the Office Assistant and choose Hide to temporarily hide the Office Assistant.



To permanently hide the Office Assistant, right-click the Office Assistant, choose Options, and remove the check mark from the Use the Office Assistant option.

| Talica | E4 • A | | | |
|---------------|--|---|---|---|
| 1 | 6 C | 0 | E | [What would you like to do?] |
| 1 | Retirement Budget | | | How do I saver a file! |
| 1 | | | | |
| EĽ. | 1NC= | | | result contract |
| 6 | Argo toolay | | | Cotors Search |
| | Age at retirement | | | V.a. |
| 5 | Veare to cetrement | 1. | _ | 23 |
| 6 | (mention) Circles 44 Komphesischer | | | TT- |
| 2 | Martgage or rent. Real unitate taxes | | | 100 |
| | Roal estatu taxes Manuerun and espan | | | 0, |
| <u>k</u> . | Home-Rock and repair | | | and the second |
| 4 | Total | | | |
| 8 | () () () () () () () () () () () () () (| 1 | _ | |
| 2 | Grooming | | _ | |
| 5 | Clothing | | | |
| 8 | Vikateni | | | |
| î. | Oter | | | |
| | Auto expersion | | | |
| 81 | Auto insurance | | | |
| 1 | Total | | | |
| | | | | |
| Σ. | Groceries | | | |
| 5 | Briartainment | | | |
| 1 | Urgani. | | | |
| | Telephone | | | |
| 2 10 4 5 10 7 | Total | | | |
| | Prescription drugs | and the second se | | |
| | Prescription druge Medical metrance | | | |
| 8 9 9 | | | | and the second se |
| | Total | | | |

Figure 1-7: Asking help from the Office Assistant

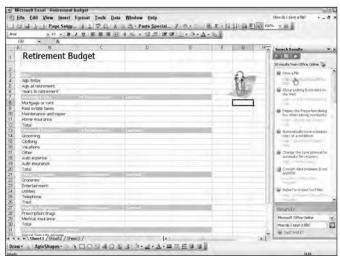


Figure 1-8: The Search Results task pane

Separate the Excel Toolbars

- 1. Choose View=>Toolbars=> Customize. The Customize dialog box appears.
- 2. Click the Options tab (see Figure 1-9).
- **3.** Select the Show Standard and Formatting Toolbars on Two Rows option. Excel displays the toolbars separately, which makes the most commonly used tools easily accessible.
- 4. Click the Close button.



In the Customize dialog box, select the Always Show Full Menus to immediately display all the menu choices when you click a menu such as File or View. With this option unchecked, you must click the down arrow on a menu to display the remainder of the options.

Display Different Toolbars

- 1. Choose View Toolbars. Toolbars currently displayed have a check mark next to them. (See Figure 1-10.)
- **2.** Select a toolbar you want to display. A few of the toolbars are
 - Standard: See Chapters 1, 7, 9, 10, and 12.
 - Formatting: See Chapters 4, 5, and 8.
 - Drawing: See Chapters 5 and 9
 - Chart: See Chapter 9
 - Picture: See Chapter 5
- 3. Repeat Steps 1 and 2 to hide a toolbar from display.

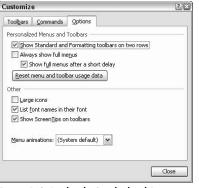


Figure 1-9: Display the Standard and Formatting toolbars in their entirety

| Ble D | | we Insert Format Tools Normal | D | ita Window Help | (al. J | How do 1 since a file? • _ ff |
|----------|-----|--|-----|----------------------|---|--|
| Artal | - | Page Break Proview | 22 | | R.R · ⊃ · Δ · 3. | an carp |
| At | | Task Pane Cul+F1 | per | ALCONTRACT, MARKED | a a constances | |
| A | n C | Teelhars + | 1 | Standard | H J K L S | - Decel Hole - |
| 1 | 1 1 | Fermula Bar | No. | Fermatting | | |
| 2 | 10 | Status Bar | 19 | Borders | | |
| 1 | - 5 | Header and Foster | 12 | Chart | | Average and the second |
| 5 | | and the second s | 14 | Control Toolbox | | "Same in the second sec |
| <u>5</u> | 19 | Çommanta | 12 | second second second | the second second second second second | 1 |
| 7 | | Custom Views_ | 8 | Drawing | | - (§ Tala 3 Centers |
| 9 | 19 | Full Screen | | Exit Design Mode | | 100 |
| 10 | | Zoom | | External Data | | Coffice Online |
| 11 | 1 | | 10 | Forms | | E S OTTES OTTER |
| 12 | | | | Formula Auditing | | 1 Question for Photometry Differ- |
| 13 | | | | List | | 1949a 5 Ser 101 allost taxes about and |
| 15 | | | | Picture | | Die |
| 痼 | | | | PivotTable | the second se | Arg. Image any up died the lost image free weat |
| 17 | | | | | | And the law |
| 18 | | | | Protection | | |
| 20 | | | | Reviewing | | d minister |
| 21 | | | 1 | Task Pane | | Sel Daning |
| 72 23 | | | | Text To Speech | | and a constant of the second s |
| 23 | | | | Visual Basic | | ¥10 |
| 24 | | | | Watch Window | | The second se |
| 26 | | | | Web | | Second. |
| 27. | | | | WordArt | | - statum |
| 28 | | | | Customire | | - Separa |
| 29 | | | 138 | Pustomire." | | - Schullering |
| 30 | | | | | | THE TURN POINT |
| 2 | | - | | | | a second s |
| 33 | | | | | | - Maria |
| 24 | | sheet2 / sheet3 / | _ | | 10 | |

Figure 1-10: The selection of Excel toolbars



Specify Workbook Properties

- 1. Choose File Properties. The Properties dialog box appears with several tabs:
 - **General:** Illustrates filename, location, size, and dates including the creation, modification, and last accessed date. Excel automatically updates the information on the General tab.
 - **Summary:** Includes fields for author, title, subject, and other similar information. (See Figure 1-11.)
 - Custom: Allows you to create custom fields that you can assign text, date, number, or even yes or no values (see Figure 1-12).
 - **Statistics:** Displays facts about the workbook usage including creation, modification and last print date, editing time, and revision numbers.
 - **Contents:** Displays a list of all worksheets included in the workbook.



To have Excel automatically prompt you to set file properties for every workbook you create, choose Tools⊏>Options and on the General tab, select the Prompt for Workbook Properties check box. When you save a workbook the first time, Excel displays the Properties dialog box.

- **2.** Select the tab on which you want to enter information and enter any desired data.
- 3. Click OK.
- **4.** Save the workbook. The workbook properties are saved with the workbook data.

| | | KILM N D P O |
|---|--|--|
| PLOSET PLOSET PLOSETURATION. VIA NUCHTEET PLOSE CONTRACTOR. VIA NUCHTEET CONTRACTORS APPLICATION FOR Appletates and the regressing at where balong a sound domained the Act Al Content OTD as under the CONTRACTORS APPLICATION FOR Appletates and the regressing at where balong a sound domained the Act Al Content OTD as under the CONTRACTORS APPLICATION FOR Appletates and the regressing at where balong a sound of the Act Answer of the Act Answer Contractors and the Act Answer Contractors and the Act Act Act Answer Contractors and the Act Act Act Act Act Act Act Act Act Act Act Act Act Act Act Act Act Act | MA FORM Properties General Statury Spaces Contents Gates Data Stature Salast Streamstan MA System Data Statu Salast | Particle Control of Co |
| Constant Lange to Liss Retransact Mark Liss Person (Liss Total) /Liss A Liss (Liss Total) /Liss A Liss and Constants Frances /Liss A liss and Constants /Liss A Liss and Constants /Liss A Liss A Liss A /Liss A Liss A | e ministel in prynanskof the AMOUNT (AMOUNT CERTINED (Panch a glancher from at sample agle (Panch a glancher from at sample agle (Panch and the answerther) | Which has programmed as achieved. Which are constrained by achieved as a scheme as SERTIFICAD as from the constraint applied. States |

Figure 1-11: Search for workbooks based on information stored in the Properties dialog box

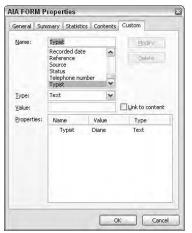


Figure 1-12: Create your own summary fields



Search for a File by Properties

- 1. Choose File=>Open. The Open dialog box appears.
- 2. Click the Tools button and choose Search from the menu.
- 3. In the File Search window, click the Advanced tab.
- **4.** Select the field you want to search from the Property drop-down list.
- *5.* In the Value box, enter the data by which you want to search.
- **6.** Click the Add button.
- 7. Select where to search from the Search In drop-down list.
- *8.* Select the file types you want to look for from the Results Should Be drop-down list as shown in Figure 1-13.
- *9.* Click the Go button. A list of the files matching your criteria appears at the bottom of the File Search window.

Save or Open Files in Different Formats

- 1. Choose File=>Save As or File=>Open.
- **2.** Select a location in which to save the file or the location in which your file is currently located.
- **3.** Select the file type you want to use from the Save as Type (shown in Figure 1-14) or Files of Type drop-down list.
- **4.** Enter a name for the file in the File Name text box or select the file you want to open.
- **5.** Click Save or Open.

12

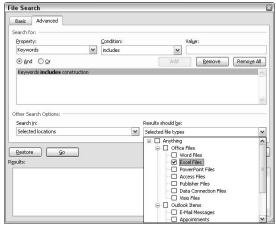


Figure 1-13: Searching for file by property values



Figure 1-14: Save a workbook as a different file type

Entering Spreadsheet Data

You can enter three primary types of data in a spreadsheet: labels, values, or formulas. Labels are traditionally descriptive pieces of information such as names, months, or other identifying statistics and usually include alphabetic characters. Values are generally raw numbers or dates and formulas are results of calculations.

The first part of this chapter shows how you can easily enter labels and values into your worksheet. But, alas, none of us are perfect and you may need to correct your mistakes. So I also show you how to delete incorrect entries, duplicate data, or move it to another area of the worksheet. You even discover an Excel feature that prevents worksheet cells from accepting the incorrect data.

Chapter 2 Set ready to. . .

| → Change the Active Cell | 14 |
|---|----|
| ➡ Enter Data | 15 |
| 🗝 Undo Data Entry | 16 |
| ➡ Edit or Delete Cell Data | 16 |
| ➡ Select Multiple Cells | 17 |
| ➡ Copy and Paste Data | 18 |
| ➡ Name a Range of Cells | 18 |
| ➡ Extend a Series with AutoFill | 19 |
| \longrightarrow Locate Cells with Data Validation | 19 |
| ⊶ Validate Data Entry | 20 |

Change the Active Cell

- 1. Open a spreadsheet in Excel. The formula bar displays the active cell location. A single worksheet has 256 columns across and 65536 rows down. Columns display the letters from A to IV and rows display numbers from 1 to 65536. A cell address is the intersection of a column and a row such as D23 or AB205.
- **2.** Move the cursor to an adjacent cell with one of the following techniques:
 - **Down:** Press the Enter key or the down arrow key. In Figure 2-1, I've moved the cursor from E9 to E10.
 - Up: Press the up arrow key.
 - Right: Press the right arrow key
 - Left: Press the left arrow key.
- **3.** To move to a cell farther away, use one of these techniques:
 - Click the mouse pointer on any cell to move the active cell location to that cell.
 - Choose Edit⁺>Go To (or press F5). The Go To dialog box displays, as shown in Figure 2-2. In the Reference box, enter the cell address you want to make active, and then click OK.
 - Press Ctrl+Home. Excel jumps to cell A1.
 - Press Ctrl+End. Excel jumps to the lower-right cell of the worksheet.
 - Press Ctrl+PageDown or Ctrl+PageUp. Excel moves to the next or previous worksheet in the workbook.

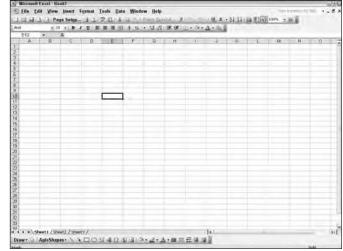


Figure 2-1: A black border surrounds the active cell

| Go To | | | 28 |
|------------|---|------|--------|
| Gō to: | | | _ |
| | | | - |
| | | | |
| | | | |
| | | | - |
| Reference: | | | |
| G32 | | | |
| | - | | Cancel |

Figure 2-2: Specify a cell address in the Go To box

Enter Data

- 1. Type the label or value in the desired cell.
- Press Enter. The data is entered into the current cell and Excel makes the next cell down the active cell. (See Figure 2-3.) How Excel aligns the data depends on what it is:
 - Label: Excel aligns the data to the left side of the cell. If the descriptive information is too wide to fit in a cell, Excel extends that data past the cell width as long as the next cell is blank. If the next cell is not blank, Excel displays only text meeting the display width. Widening the column displays additional text.



To enter a value as a label, type an apostrophe before the value.

- Whole value: Excel aligns the data to the right side of the cell.
- Value with a decimal: Excel aligns the data to the right side of the cell, including the decimal point, with the exception of a trailing 0. For example, entering 246.70 displays 246.7. The trailing zero is not lost; it simply doesn't display. (See Chapter 4 to change the display appearance, column width, and alignment of your data.)



If a value displays as scientific notation or number signs such as in Figure 2-4, it means the value is too long to fit into the cell. You need to widen the column width.

• Date: If you enter a date, such 12/3, Dec 3, or 3 Dec, Excel automatically returns 03-Dec in the cell, but the formula bar displays 12/03/2005. See Chapter 4 to change the date appearance.

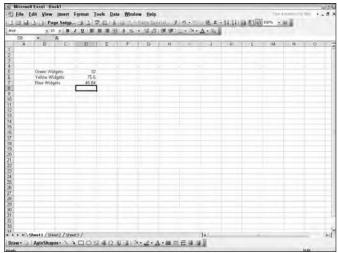


Figure 2-3: Enter labels or values into a cell

| nal . | | | # # 王 | \$. 16 | • 适款 第 8 | E | A - 14 | | | | | | |
|---------|---|-------------|-------|---------|----------|-----|--------|-----|---|-----|------|---|---|
| D9 A | • A 158 | | E | | G 18 | - 1 | | 1.6 | E | M | 1 11 | a | |
| | 0 6 | | - | | | | | 0 | - | -40 | | 0 | - |
| | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | |
| - | Gram Widgets | 32 | | | | | | | | | | | |
| 1 | Yellow Widgets | 75.6 | | | | | | | | | | | |
| | Eilue Widgets | 45 BA | | | | | | | | | | | |
| | Sales Expenses | SARESHING . | | | | | | | | | | | |
| 6 | | | 1 | | | | | | | | | | |
| _ | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | - | | | | | | | |
| i. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | |
| - | | | | | | | | | | | - | | |
| - | Green Widges Hart Widgets Sales Espense Net 1 (2004) 23 April 2004 April 2004 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | |

Figure 2-4: Widen the column to fully display the value

Undo Data Entry

- 1. Enter text into a spreadsheet.
- **2.** To undo any actions or correct any mistakes you make when entering data, do one of the following:
 - Choose Edit=>Undo.
 - Press Ctrl+Z.
 - Click the Undo icon on the toolbar.
- **3.** Keep repeating your favorite undo method until you're back where you want to be.
- **4.** To undo several steps at once, click the arrow on the Undo icon and select the step you want to undo from. (See Figure 2-5.)



You can't undo some actions and Excel indicates this by changing the Undo command (on the Edit menu) to Can't Undo.

Edit or Delete Cell Data

| Action | Edit | | | | | |
|-------------------------------|--|--|--|--|--|--|
| Choose Edit=>Clear=>Contents. | Delete the contents and retype new cell information. | | | | | |
| Press the Delete key. | Double-click the cell contents and press the Backspace key to delete unwanted characters; then, type new characters. (See Figure 2-6.) | | | | | |

| Elle. | Edit View Inner | t Fermat Tools | Data Window Help | | | | | e similar lit | ··· 6 |
|----------------|---------------------------------|---|---|---|------|------|--------|---------------|-------|
| 1000 | A Page Set | ローコンマル | A to the first front day | 1 | 1.11 | 自王司司 | 100% - | 48 | |
| Anal | | | 田本水・山田(東田 | Typerg Asses Expected, et all A Fyron g 155-34" as Dif | 1 | | | | |
| D9 | fi 152 | | | Otor | | | | _ | |
| A | BC | 0 E | 1 B H | Clear | К. | E | м | N | 0 |
| 3 | | | | Column Widdle | h | | | | |
| 3 | | | | Format Cells Format Cells | 1 | | | | |
| 4 | | | | Format Cells | 1.5 | | | | |
| 5 | Green Widgets Yellow Widgets | 32 75.6 | | Typing '456.7095' In D7 Skyle | | | | | |
| D- | Eks Widgets | 45 B4 | | Cearro Width | - | | | | |
| 5 | | | | Column Webb | | | | | |
| 9 | Sales Expenses | SATURATION . | | Typing 'w07*9099990' in (7) Undu 7 Actions | | | | | |
| t l | 100 | | | 1000 / ACOPE | | | | | |
| 5 | | | | | | | | | |
| 2 | | | | | | | | | |
| 85 | | | | | | | | | |
| 5 | | | | | | | | | |
| 7 | | | | | | | | | |
| 1 | | | | | | | | | |
| 1 | | | | | | | | | |
| 6 | | | | | | | | | |
| <u></u> | | | | | | | | | |
| 1 | | | | | | | | | |
| L I | | | | | | | | | |
| 5 | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | - | | |
| 2 | | | | | | | | | |
| 0 | | | | | | | | | |
| 1 | - | | | | | | | | |
| 12345678900123 | | | | | | | | | |
| 1 | Sheet1 / Sheet2 /3 | | | 100 | | | | | |
| | | | | 14.1 | | | | | 1 18 |
| Deaw+ | AutoShapes . | A [] [] [] [] [] | 2 回日 3・2・4・年1 | E 4 4 2 | | | | | |
| whi i | and spectral statements | Constant of the second of the second s | The state of the second state of the second state | 1 | | | | | 4.84 |

Figure 2-5: Select the steps you want to reverse

| | | view Insert Forma | Tools Bata V | Vindow He | lo lo | | | | See. 10 | in the test | |
|------|-----|-----------------------|-----------------|-----------|----------|------------|---|---|---------|-------------|------|
| 1 | G . | 11-1 11-2 12 1A | 1 - 1 41 - | 3 | - 11/11/ | 163 | | | | | |
| 414 | | * 10 + D I U | 単三部 第二日13 | 1000 | - P. (P) | _ · 01 · A | - | | | | |
| - | | • X J & Ye Watgets | | | | | | | | | _ |
| 1 | .A | B C | D | E | F. | 6 | H | 1 | 3 | ĸ | L |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 3 | | Green Widgets | 32 00 | | | | | | | | |
| | | YelWidgets | 75.60 | | | | | | | | |
| | | Blue Widgets | 45.84 | | | | | | | | |
| Ċ. | | Second Strategy | | | | | | | | | |
| 6 | | Sales Expenses | 456.79 | | | | | | | | |
| 0. | | and the type is a | | | | | | | | | |
| 1 | | | | | | | | | | | |
| Z. | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 0 | | - | | | | | | | | | |
| 1 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| | | t1 (Short2 [Short2]. | | | | 10 | | _ | | _ | 1.20 |
| Diaw | - A | gioShapes - | 1.12.18.77.85.1 | 3.2. | A-== | 田田田田 | | | | | |
| | | | | | | | | | | 14.84 | |

Figure 2-6: Edit cell contents without having to start over

Select Multiple Cells

0

0

6

| What to Select | Do This |
|------------------------|--|
| Sequential cells | Hold the Shift key and select the last cell you want to select. All cells in the selected area are highlighted, with the excep- tion of the first cell. It looks like it's not included in the selected area, but it is. Figure 2-7 shows a sequential area selected from cell B4 to cell F15. Notice the black border surrounding the selected area. |
| Non-sequential cells | Hold the Ctrl key and click each additional cell you want to select. Figure 2-8 shows the nonsequential cells A4, C7, and D13 through D20 selected. |
| A single entire column | Click a column heading. |
| Multiple columns | Drag across multiple column headings. |
| A single entire row | Click the row number. |
| Multiple rows | Drag across multiple row numbers. |
| The entire worksheet | Click the small gray box located to the left of column A and above row 1. Optionally, you can select all cells in a work-sheet by pressing Ctrl+A. |

Click any nonselected cell to clear the selection.

Optionally, click and drag the mouse over a group of cells to select a sequential area.

You can include entire rows and entire columns along with individual cells or groups of cells, when making nonsequential cell selections.

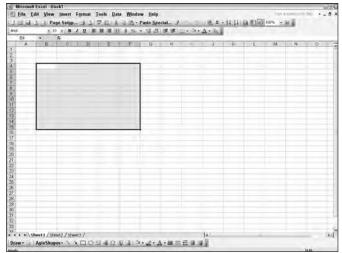


Figure 2-7: A sequential cell selection

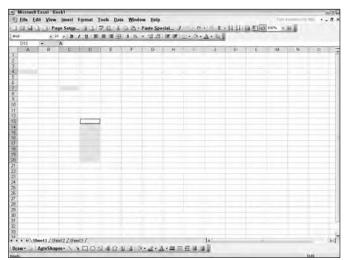


Figure 2-8: Nonsequential cells selected

Copy and Paste Data

- 1. Select the area of data you want to copy. The selected area is highlighted.
- **2.** Choose Edit⁺>Copy (or press Ctrl+C). The selected cells have a *marquee* (which looks like marching ants) around them (see Figure 2-9).
- 3. Click the cell where you want to copy the selected area.
- **4.** Choose Edit⇔Paste (or press Ctrl+V). The selected cells are pasted into the new location.
- *5.* Paste the cells into another location or press Escape to cancel the marquee.



 $\label{eq:choose Edit} Choose Edit{=}Cut \mbox{ (or press Ctrl+X) and then Edit{=}Paste to move, instead of duplicate, the selected cells to a different location.}$

Name a Range of Cells

- 1. Select the cells you want to name.
- 2. Choose Insert ⇒Name ⇒Define. The Define Name dialog box shown in Figure 2-10 appears.
- **3.** In the Names in Workbook text box, enter a name (up to 256 characters) for the range you selected. Range names are not case sensitive and must begin with a letter or the underscore character and cannot include a space or a hyphen.
- **4.** Click the Add button and then the Close button.



Jump quickly to a range by selecting the range name in the Go To dialog box.

| Microsoft Excel Budgets 2003 File Edit View Insett Form | nat Tools Da | ata Windo | w Help | | | | | - | | de tra | |
|--|---------------|-----------|--------------|------------|--------|-----------|-------|---------|---|--------|------|
| 1 2 1 2 1 Page Settin | 1241 | 1334 | Paste Specia | LJA RR. | | | (A E) | interes | | | |
| A3 * & Sales Prod | | | | | | _ | | | _ | | |
| 4 | 1) Jamaary | February | D March | April | May | 5 June | H | - 1- | 3 | ÷ | 11.2 |
| 2 INCOM | January | | manual . | Adda | | | | | | | |
| Sales Pipduct A | 13,456 | 13,450 | 13,458 | 13,458 | 41,955 | 15,458 | | | | | |
| Sales Product B | 6,250 | 0 | 0. | 6,250 | D | 0 | | | | | |
| Sales Product C | 11,810 | 11,810 | 11,810 | 11,810 | 11,810 | 11,810 | | | | | |
| Repair Revenue | 0 | Ű | 4,000 | 4,000 | 4,000 | 4,000 | | | | | |
| Walkeral tecome | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | 7,600 | | | | | |
| CHental Inclose | 3,900 | 0 | 0 | -0 | 0 | 0 | | | | | |
| Congrest income | - E | 01 | 0 | 0 | 6 | ũ | | | | | |
| TOTAL REVENUE | - C | | | | | | | | | | |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 0 | | | | | | | | | | | |
| ñ 7 | | | | | | | | | | | |
| 0 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 0 | | | | | | | | | | | |
| 1 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| Ť. | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 0. | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| + + + Jan Jun / XADec / | | | | | 141 | | | | | | 151 |
| | - | - | | | | | | | | | |
| Draw - AutoShapes - 🕆 🤉 🗔 | 0242 | 14 4 3 | · 2 · A | # 11 E | 4.4.5 | | | | | | |
| elect destruction and press CNTER or choose Par | te- | | | | | | | | | 14.64 | |

Figure 2-9: Marching ants form around a copied area

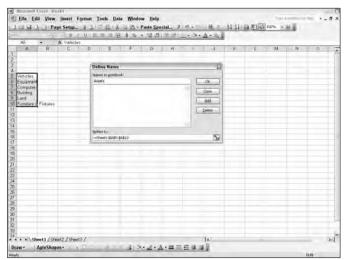


Figure 2-10: Creating a named range

Extend a Series with AutoFill

- 1. Type the first cell of data with data such as a day (Tuesday) or a month (August) and press Enter. AutoFill works with days of the week, months of the year, or yearly quarters such as 2nd Qtr.
- **2.** Position the mouse pointer on the small black box at the lower-right corner of the cell. Your mouse pointer turns into a small black cross. Drag the small black box across the cells you want to fill. You can drag the cells up, down, left, or right.
- **3.** Release the mouse. Excel fills the selected cells with a continuation of your data. Figure 2-11 shows how Excel filled in the cells with the rest of the days of the week.



If you use AutoFill on a single value or a text word, Excel duplicates it. For example, if you use AutoFill on a cell with the word **Apple**, all filled cells contain **Apple**.



To AutoFill a series of numbers, enter two values in two cells, such as 1 and 2. Select both cells, and then use the AutoFill box to highlight cells and Excel continues the series as 3, 4, 5, and so forth.

Locate Cells with Data Validation

- 1. Choose Edit=>Go To. The Go To dialog box appears.
- 2. Click the Special button.
- **3.** In the Go To Special dialog box, shown in Figure 2-12, select the Data Validation option.
- **4.** Select All; then click OK. Excel highlights all cells that have data validation.



To remove data validation, from the Data Validation dialog box, click the Clear All button. The following section shows how to validate data entry.

| | CA | | & Monda | | | TU | | 11.00.00 | - | · A - 14 | | | | | |
|-------------------|----|---|---------|---------|--------|-------------|--------|----------|--------|----------|-----|---|---|---|---|
| | A | В | | D | L E | TF | G | н | 1.5 12 | 1 | 8 | L | м | N | 0 |
| 44 | | | | | | | | | | | | | | | |
| ħ. | | | | | | | | | | | | | | | |
| | | | Monatay | Tuesday | Wednes | da Thursday | Friday | Saterday | Sinday | Mendary | | | | | |
| 81. | | | _ | | 1 | | | 1 | | _ | 181 | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | - | | | | | | | | | |
| ÷ | | | | | | | | | | | | | | | |
| 51 | | | | | | | | | | | | | | | |
| ťĽ. | | | | | | | | | | | | | | | |
| 81 | | | | | | | | | | | | | | 0 | |
| 1 | | | | | | | | | | | | | | - | |
| 2 | | | | | | | | | | | | | | | |
| 5.00 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |
| 1 2 3 4 5 5 7 9 9 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | - | | | - | |
| 1 | | | - | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | |
| 61. | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |

Figure 2-11: Using AutoFill for days of the week

| Go To Special | 8 |
|------------------|-----------------------|
| Select | |
| ◯ Comments | ○ Row differences |
| C Constants | Column differences |
| C Eormulas | O Precedents |
| | Dependents |
| | |
| | A |
| 14 | O Last cell |
| C Blanks | ○ Visible cells only |
| O Current region | O Conditional formats |
| O Current array | Data validation |
| O Objects | ⊙ Alj |
| | () Same |
| | K Cancel |

Figure 2-12: Locating cells with data validation restrictions

Validate Data Entry

- Select the cell or cells you want Excel to validate upon data entry. Then choose Data=>Validation. The Data Validation dialog box displays.
- **2.** From the Settings tab, choose the type of validation you want Excel to check from the Allow drop-down list:
 - Whole Number or Decimal: Specify the upper and lower limits of allowable data values.
 - Lists: Define a list, a range of cells in the existing worksheet, or a named range. (See Figure 2-13.)
 - **Dates or Times:** Specify a valid date or time ranges or limitations.
 - Text Length: Specify that the number of characters in the data is within the limits you want.



When creating a list, select the In-Cell Dropdown check box if you want the choices to appear when the cell is clicked.

- **3.** Select a criterion such as Between, Greater Than, Equal To, or Less Than or Equal To from the Data drop-down list.
- **4.** Select other criteria such as a max and min value or specify a location for a list of data you want to allow. You can type values or refer to cell addresses. If you want to refer to a range name, precede the range name with an equal sign (=).
- **5.** On the Error Alert tab, select an option from the Style drop-down list (see Figure 2-14) to determine whether Excel warns you about an invalid entry or stops you from entering an invalid entry.



Figure 2-13: Create a list of acceptable options or select one from the worksheet

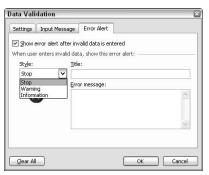


Figure 2-14: Determine the action to take upon invalid data entry

6. Click OK.

20

Building Formulas

This chapter is all about the math. With Excel, you can create formulas to perform calculations. The calculations can be simple such as adding 2 plus 2 or they can be extremely complex such as those used to calculate depreciation. But don't despair; you don't have to do most of the work. Excel includes over 230 built-in calculations in nine different categories, which are called functions.

Functions contain arguments, which appear in parentheses following the function's name. The arguments are the details you provide to Excel indicating which numbers to calculate in the function. Some functions require several arguments to function correctly but again, don't worry; Excel contains a Function Wizard to walk you through the entire process.

The primary tasks in this chapter include

- Creating simple and complex formulas by typing them into a cell.
- Analyzing data with Excel's timesaving functions.
- Creating cell ranges separated with a colon for a sequential cell selection or by a comma to list specific cell locations.
- Evaluating formula errors and locate a cell's precedents and dependents.

Chapter

Get ready to. . .

| | 22 |
|--|----|
| | 23 |
| \Longrightarrow Add Numbers with AutoSum | 24 |
| ➡ Find an Average Value | 24 |
| | 25 |
| 🖦 Edit a Formula | 25 |
| ➡ Define an Absolute Formula | 26 |
| | 26 |
| ightarrow Build a Formula with the Function Wizard . | 27 |
| ➡ Generate an IF Statement Formula | 28 |
| metroubleshoot Formula Errors | 29 |
| 🖚 Audit Formulas | 30 |
| | |

Create Simple Formulas with Operators

- 1. Enter values in two different cells; however, formulas do not need to reference a cell address. They can contain an actual number.
- 2. In the cell that you want the calculation of the two values, type an equal sign (=). All formulas begin with an equal sign.
- **3.** Type the first cell address or type the first value you want to include in the formula. In the example in Figure 3-1, I'm adding two cell references (B5 and B6) together.
- 4. Using the keys on the main part of your keyboard or from the numeric keypad, type an operator. Operators include the following:
 - The plus sign (+) to add
 - The minus sign (-) to subtract
 - The asterisk (*) to multiply
 - The slash (/) to divide
- 5. Type the second cell address or the second value you want to include in the formula.
- 6. Press Enter and Excel displays the results of the calculation in the selected cell. (See Figure 3-2.)



The formula bar at the top displays the actual formula.



(0)

22

Formulas can have multiple references. For example, you could have a formula =B5+B6+B6+B8. Formulas with multiple operators are called compound formulas.

| - | All all the second s | armat Taola Data V | 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | 111 13 | in the second | | | | 7.43 |
|------|---|--------------------|---|--------|---------------|---|---|---|------|
| Ē | 11 P. / | | | | а- <u>Д</u> - | | | | |
| - | H= -×√⊼-05- | В | C | | E | F | G | н | |
| - | A | B | C | D | E . | r | G | п | - |
| 1 | | | | | | | | | - |
| 2 3 | | | | | | | | | |
| | | | | | | | | | |
| 4 | Salesperson | Sales \$ | - | | | | | | |
| 5 | Bob | 351742 | 9 | | | | | | |
| 6 | Susan | 584931 | 1 | | | | | | |
| 7 | | =B5+ | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | _ |
| 21 | | | | | | | | | |
| 22 | w\Sheet1/9wet2/5heet | 1/ | | | B. | | | | |
| Urav | | | 13.42.2 | -==== | | | | | |

Figure 3-1: All formulas begin with the equal sign

| | icronoff Escal - Gook 1 Sin Edit Vinw Insert | Farmat Tools Data W | | | | | | | 1.1 |
|----------|---|---------------------|---------|--------|--------|---|---|---|------|
| 415 | | | 1.1.1.1 | 111 HR | | | | | |
| _ | B7 - A =06+0 | B | C | D | E | F | G | H | - |
| - | A | B | L. | U | 5 | | G | п | - |
| 1 | | | | | | | | | - |
| 23 | | | | | | | | | |
| | A | 0.10 | | | | | | | |
| 4 | Salesperson | Sales \$ | | | | | | | - |
| 5 | Bob | 351742 | | | | | | | |
| 6 7 | Susan | 584931 | | | | | | | |
| 1 | | 936673 | | | | | | | - |
| 8 9 | | | | | | | | | |
| 9 | | | | | | | | | |
| | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | _ | | | | | | | | |
| | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 16 | | | | | | | | | |
| | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| ?? | Wheet1/Seet27956 | nici / | | | ls. | _ | | | 1.16 |
| Dear | AutoShapes - > | DOM-RODA | 13-2-4 | 「単三百日 | 1.11.0 | | | | |

Figure 3-2: A simple formula

Create Compound Formulas

- 1. Type values in three or more different cells.
- 2. Select the cell where you want the formula.
- 3. Type the equal sign and then the first cell reference.
- 4. Type the first operator and then the second cell reference.
- 5. Type the second operator and then the third cell reference.



Compound formulas are not limited to three references. They can contain many different cell references and you can use cell references multiple times in a compound formula.

6. Press Enter. Excel displays the results of the calculation in the selected cell. The actual formula appears in the formula bar as shown in Figure 3-3.



If you were paying attention in your high school algebra class, you may remember the Rule of Priorities. In a compound formula, Excel calculates multiplication and division before it calculates addition and subtraction. This means that you must include parentheses for any portion of a formula you want calculated first. As an example, in Figure 3-4, you see where the formula 3+5*2 gives a result of 13, but (3+5)*2 gives a result of 16.



You can include range names in formulas such as =D23* CommissionRate where a specific cell was named CommissionRate. See Chapter 2 about using range names.



Compound formulas can have multiple combinations in parentheses and can contain any combination of operators and references. A formula might read ((B5+C5)/2)*SalesTax, which would add B5 and C5, divide that result by 2 and then multiply that result times the value in the cell named SalesTax.

| Microsoft Excel Bank 1 File Edit View Inser | rt Format Tools Data W | indew Help | | | | - | and the first of | - 0 |
|---|------------------------|------------|-------|------------|---|---|--|------|
| Eile Edit View Incer | rt Format Tools Data W | | | 1075 4 4 4 | | | and the second s | 0 |
| Artal = 10 = [] | | | w.w | | | | | |
| en × A+e | 5+86-87 B | с | D | Ε | F | G | н | 1 |
| 1 | D | U. | U | 6 | | 6 | п | |
| 2 | | | | | | | | |
| 2 3 | | | | | | | | |
| 4 Salesperson | Sales \$ | | | | | | | |
| 5 Bob | 351742 | | | | | | | |
| 6 Susan | 584931 | | | | | | | |
| 7 Less: Returns | 147934 | | | | | | | |
| 8 | | | | | | | | |
| 9 Total Sales | 788739 | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | 14.1 | _ | | - | - 34 |
| Draw+ AutoShapes+ | A DOS 40 MB | 13-2-3 | 「単三日」 | 1.11 | | | | |
| | | | | | | | 14.84 | _ |

Figure 3-3: A compound formula

| 121 | 13.19.2 | rit Format Too 2014 1 | - 1 m | olb 2 - 71 - 71 - 71 - 78 2 - 71 - 71 - 71 - 71 - 71 - 71 - 71 - 7 | | | | |
|-------------------|-----------------|--|--------------|--|-----------------|---|---|---|
| And D8 | | 0 / U = 1 (3+5)*2 | [测测:1:1-1:1] | 古建建二. | ×- <u>A</u> • 1 | | | |
| | A | В | С | D | E | F | G | |
| 1 | | | | | | | | _ |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | Formula | Result | | | | |
| 7 | | | 3+5*2 | 13 | | | | |
| 8 | | | (3+5)*2 | 16 | | | | |
| 9 | | | 10 0/ - 1 | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| A CONTRACTOR OF A | Sheet3 (Sheet2) | and the second sec | | _ | TAL | | | |

Figure 3-4: The Rule of Priorities in action

Add Numbers with AutoSum

- 1. Click the cell beneath a sequential list of values.
- 2. Click the AutoSum (Σ) button on the toolbar. Excel places a marquee (marching ants) around the cells directly above the current cell. (See Figure 3-5.)



If the cells directly above the current cell have no values, Excel selects the cells directly to the left of the current cell. If you want to add a group of different cells, highlight the desired cells.

3. Press the Enter key to display the sum.



24

The formula bar displays the actual formula that begins with the equal sign and the word SUM. The selected cells are shown in parentheses and the beginning and ending cells are separated by a colon.

Find an Average Value

- 1. After selecting the cell beneath a sequential list of values, click the arrow next to the AutoSum button. Besides the Sum operation, Excel displays a list of other calculation options as shown in Figure 3-6:
 - Average: Calculated by adding a group of numbers and then dividing by the count of those numbers.
 - **Count:** Counts the number of cells in a specified range that contains numbers.
 - Max: Determines the highest value in a specified range.
 - Min: Determines the lowest value in a specified range.
- **2.** Choose Average and then press Enter to select the marquee. The selected cell displays the average value.

| S Microsoft Excel Baak 1 Eile Edit View In | | Yindow Halp | | | | | normality fini | • - 0 |
|---|-------------------|-------------|---|------|---|---|----------------|-------|
| | 0.1.0 8.8.8 ~ 1 | | 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | |
| •••• • × √ ∧ A | -SUM(66 612) | C | D | E | F | G | н | |
| 1 | B | U | U | - | | 9 | п | - |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 Salesperson | Sales Units | | | | | | | |
| 5 Bob | 75 | 1 | | | | | | |
| 6 Susan | 134 | | | | | | | |
| 7 Sam | 32 | | | | | | | |
| 8 Erin | 86 | | | | | | | |
| 9 Andrew | 147 | | | | | | | |
| 10 Spencer | 92 | | | | | | | |
| 11 Alex | 105 | | | | | | | |
| 12 Daniel | 210 | | | | | | | |
| 13 | =SUM(B5:B1 | B) | | | | | | |
| 14 | Galfijmanders (hi | [][instin | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 . H Sheet] / Sheet 2 | /Sheet3 / | - | | 14.5 | | | | - 14 |
| Draw- AutoShapes- | | 10.213 | | | | | | |
| | | | | | | | 14.84 | |

Figure 3-5: Using the AutoSum function

| - | | 1-110-114 | Σ- | 143111114H | 1 | | | |
|----|--|----------------------|---------|--|---|---|---|-------|
| 2 | | | 100 | Sum | 4 | | | |
| - | HI - N V & AVERAG | | | Average | | | | _ |
| - | A | B | C | Count Max | F | G | н | |
| 1 | | | - 18 | Min | | | | |
| 2 | | | - 18 | More Exections. | | | | |
| 3 | | Same and | 1.00 | Market and the second sec | | | | |
| 4 | Salesperson | | ebruary | | | | | |
| 5 | Bob | 75 | 94 | | | | | |
| 6 | Susan | 134 | 103 | | | | | |
| 7 | Sam | 32 | 74 | | | | | |
| 8 | Erin | 86 | 98 | 8 81 | | | | |
| 9 | Andrew | 147 | 126 | 5 172 | | | | |
| 10 | Spencer | 92 | 107 | 7 106 | | | | |
| 11 | Alex | 105 | 91 | 1 100 | | | | |
| 12 | Daniel | 210 | 164 | 4 321 | | | | |
| 13 | AVERAGE SALES | =AVERAGE(B5 | (B12) | | | | | |
| 14 | the state of the s | [MCRAIL(number 1, [m | nem2]_] | | | | | |
| 15 | | | | | | | | |
| 16 | 1 M 10 | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 2? | WA Sheet3 / Grant 2 / Street 3 | | | (lat | | | | - set |

Figure 3-6: Selecting the AutoAverage function

Copy Formulas with AutoFill

- 1. On a cell with a formula, position the mouse on the AutoFill box in the lower-right corner. Make sure the mouse pointer turns into a black cross.
- **2.** Drag the AutoFill box to include the cells you want to copy the formula to and then release the mouse button. (See Figure 3-7.) The AutoFill method of copying formulas is helpful if you're copying a formula to surrounding cells.



When you copy a formula, the formula actually changes because a copied formula is relative to the position of the original formula. For example, if the formula in cell D23 is B23+C23 and you copy the formula to the next cell down, to cell D24, Excel automatically changes the formula to B24+C24. If you do not want the formula to change when copied, you must make the originating formula an absolute formula (see the "Define an Absolute Formula" section coming up).

Edit a Formula

- 1. Double-click the cell containing the formula you want to edit (or press F2). The cell expands to show the formula instead of the result. (See Figure 3-8.)
- **2.** Use the arrow keys to navigate to the character you want to change.
- **3.** Delete any unwanted characters by pressing the Backspace key and type any additional characters you want to add.



Press the Delete key to delete the entire formula and start over.

4. Press the Enter key.

| Artis! | - 10 - B J | | | 1111 Haller 1212 | | | | | |
|--------|-----------------------|---------|----------|---------------------|---|---|---|---|--|
| 1 | 814 - & =AVERA | | | | | | | | |
| | A | В | C | D | E | F | G | H | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | Salesperson | January | February | March | | | | | |
| 5 | Bob | 75 | 94 | 97 | | | | | |
| 6 | Susan | 134 | 103 | | | | | | |
| 7 | Sam | 32 | 74 | | | | | | |
| 8 | Erin | 86 | 98 | | | | | | |
| 9 | Andrew | 147 | 126 | 172 | | | | | |
| 10 | Spencer | 92 | 107 | 106 | | | | | |
| 11 | Alex | 105 | 91 | 100 | | | | | |
| 12 | Daniel | 210 | 164 | 321 | | | | | |
| 13 | Sector Sector | | | | | | | | |
| 14 | AVERAGE SALES | 110.125 | | | | | | | |
| 15 | A STA RECEIPTION OF A | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

Figure 3-7: Using AutoFill to duplicate a formula

| - | HT - X J A -105-00" | NERES. | | 27.2-2- | · 4 · | 6 | | | |
|----|---------------------|---------|----------|---------|-------|---------------|---|---|--|
| | A | В | C | D | E | F | G | H | |
| 1 | | | | | | | | | |
| 2 | - | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | Salesperson | January | February | | | - | | | |
| 5 | Bob | 75 | 94 | 97 | | =(B5+B6*2 | | | |
| 6 | Susan | 134 | 103 | | | Action County | | | |
| 7 | Sam | 32 | 74 | | | | | | |
| 8 | Erin | 86 | 98 | | | | | | |
| 9 | Andrew | 147 | 126 | | | | | | |
| 10 | Spencer | 92 | 107 | | | | | | |
| 11 | Alex | 105 | 91 | 100 | | | | | |
| 12 | Daniel | 210 | 164 | 321 | | | | | |
| 13 | | | | | | | | | |
| 14 | AVERAGE SALES | 110 125 | 107.125 | 133.5 | | | | | |
| 15 | MUNIC STREET | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | 1 | | | | | | | | |
| 21 | | | | | | | | | |

Figure 3-8: Edit a formula

Define an Absolute Formula

- **1.** To prevent a formula from changing a cell reference as you copy it to a different location, you need to lock in an absolute cell reference by following one of these methods:
 - Lock in a cell location: Type a dollar sign in front of both the column reference and the row reference (for example **\$B\$2**). If the original formula in cell F5 is =E5*\$B\$2, and you copy the formula to cell F6, the copied formula would read =E6*\$B\$2 instead of =E6*B3, which is what it would read without the absolute reference. (See Figure 3-9.)
 - Lock in a row or column location only: Type a dollar sign in front of the column reference (\$B2) or in front of the row reference (B\$2).
- **2.** Copy the formula as needed to other locations. Notice that the absolute cell reference in the original formula remains unchanged in the copied formulas.

Copy Values Using Paste Special

- Select a cell (or group of cells) containing a formula and then choose Edit Copy. A marquee appears around the selected cell.
- **2.** Select the cell where you want the answer; then choose Edit=>Paste Special. The Paste Special dialog box, shown in Figure 3-10, appears.
- 3. Select the Values option.
- **4.** Click OK. Excel pastes the result of the formula, not the actual formula. If the original formula changes, this value doesn't change.

| | Q1 17.0 | | | 12.2111148 | | | | | |
|----|------------------------|---------|----------|------------|-------|------------|----|---|---|
| | HT - X V A HEART | В | С | D | E | F | G | н | 1 |
| 1 | A | В | U | .0 | E | F | 6 | н | 1 |
| | Commission Rate | 0.25 | - | | | | | | |
| 3 | Commission Rate | 0.25 | | | | | | | |
| | Salesperson | January | February | March | TOTAL | COMMISSI | ON | | |
| | Bob | 75 | 94 | | | =E5*\$B\$2 | | | |
| | Susan | 134 | 103 | | | | | | |
| | Sam | 32 | 74 | | | | | | |
| 8 | Erin | 86 | 98 | 81 | 265 | | | | |
| 9 | Andrew | 147 | 126 | 172 | 445 | | | | |
| 10 | Spencer | 92 | 107 | 106 | 305 | | | | |
| 11 | Alex | 105 | 91 | 100 | 296 | | | | |
| 12 | Daniel | 210 | 164 | 321 | 695 | | | | |
| 13 | TOTALS | 881 | 857 | 1068 | 2806 | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | w\+9wet3/creat2/frants | | | | | | | | |

Figure 3-9: A formula containing an absolute reference

| 44 | - 10 - (B / U | P.R.R.S | 1. 7. 20. 1 | 19.5 | (R. R.) | | 4- | 2.8 | | | | |
|----|----------------------|---------|------------------|------|------------------|------|------|-----|---------|----|---|----|
| | A | B | | С | D | | Ε | | F | G | н | F. |
| 1 | | | | | | | | | | | | |
| 2 | Commission Rate | | 0.25 | | | | | | | | | |
| 3 | | | Pasta Spe | ciai | | | 213 | 1 | | | | |
| 4 | Salesperson | January | 1 CAN | | Tinter: | | | C | OMMISSI | ON | | |
| 5 | Bob | | Chande | | All systems for | die | | 266 | 66.5 | | | |
| 6 | Susan | | yders, | | Column gell | | | 366 | 91.5 | | | |
| 7 | Sam | | Comme | | Trailing and the | | | 168 | 42 | | | |
| 8 | Erin | | limiter. | | Contra anti- | | | 265 | 66.25 | | | |
| 9 | Andrew | | 10101 | | Citation . | | | 145 | 111.25 | | | |
| 10 | Spencer | | Cables | | Contraction | | | 305 | 76.25 | | | |
| 11 | Alex | | - prove | | | | | 296 | 74 | | | |
| 12 | Daniel | | C He LH | HE 1 | - nermo | | | 595 | 173.75 | | | |
| 13 | TOTALS | | Patentin | | 18. | Care | a. 1 | 306 | 701.5 | | | |
| 14 | Constraint. | | 1 - constitution | - | | - | - | | | | | |
| 15 | 1st Quarter Expenses | | | | | | | | | | | |
| 16 | Rent | | 400 | | | | | | | | | |
| 17 | Advertising | | 652 | | | | | | | | | |
| 18 | Telephone | | 129 | | | | | | | | | |
| 19 | Commissions | - | _ | | | | | | | | | |
| 20 | Salaries | - | 960 | | | | | | | | | |
| 21 | | | 2.5.4 | | | | | | | | | |
| 22 | | | | | | | | | | | | |

Figure 3-10: Paste only the value, not the formula with the Paste Special feature

26

Build a Formula with the Function Wizard

- 1. Select the cell where you want to enter a function; then choose Insert ⇒ Function. The Insert Function dialog box appears.
- **2.** Select a function category from the Or Select a Category drop-down list. (See Figure 3-11.)



To make the functions easier to locate, Excel separates them into categories including Financial, Date, Math & Trig, Statistical, Lookup and Ref, Database, Text, Logical, and Information. For example, the Sum function is in the Math category, while Average, Count, Max, and Min are Statistical functions. Functions that calculate a payment value are considered Financial functions.

- **3.** Select a function name from the Select a Function list. A brief description of the function and its arguments appear under the list of function names.
- **4.** Click OK. The Function Arguments dialog box displays. The Function Arguments dialog box you see depends on the function you select. Figure 3-12 shows the PMT function that calculates a loan payment based upon constant payments and interest.
- **5.** Type the first argument amount or cell reference or click the cell in the worksheet. If you click the cell, Excel places a marquee around the selected cell.
- 6. Press Tab to move to the next argument.
- 7. Type or select the second argument.
- 8. Repeat Steps 6 and 7 for each necessary argument.
- **9.** Click OK. Excel calculates the result based on the arguments you specified.

| earch for a function: | | |
|--|--|----------|
| Type a brief descript click Go | ion of what you want to do a | and then |
| Or select a <u>c</u> ategory: | Financial | ~ |
| elect a functio <u>n</u> : | Most Recently Used All | ~ |
| ISPMT MIRR NPER NPV PMT | Financial Date & Time Math & Trig Statistical Lookup & Reference | |
| PPMT PV PMT(rate,nper,pv, l | Database Text Logical | |

Figure 3-11: Select from over 230 built-in functions

| - | 27 3 10 1 | 0.0.0.0.0.001 | 1000 million (194 | 10.001004 | Sec. | | | | |
|----|-----------------------|---------------|-------------------|-----------------------|-----------------------------------|--------------------|-------------------------|-----|---|
| - | HT - X √ & -PMT(B) | | | | | | | | |
| | A | 8 | C | D | E | F | G | н | 1 |
| 1 | | | | and the second second | | 1 | | | _ |
| 2 | loan amount | \$50,000 ; | Function A | Iguments | | | W | | |
| 3 | monthly interest rate | 0.42% | | Rate to | | - 10 M | Index 7 | | |
| 4 | # of payments | 60 | | frepers ton | | Si - ta | | 1.1 | |
| 5 | payment amount | F(B3,B4,B2) | | NE | | 54-5000 | 5 | | |
| 6 | | | 1000 | PR. | | 34- | | | |
| 7 | | | | Traki | | 59- | | | |
| 8 | | | in the second | | | - 7465 | 5616822 | | |
| 9 | | | CRUMENTS | somethics and | h based on constant pai | VANALES AND VEDERA | THAT AND AND AND | | |
| 10 | | | | - | L with an other for the design of | | | | |
| 11 | | | | worth rune. | Contraction of the second | town to serve to t | on choice o | | |
| 12 | | | Torestread | - 299 | 1.55) | | | | |
| 13 | | | Neigo go itse h | inenes | | T DK | 1 Gevet | | |
| 14 | | | | | | - | (and the second second | 4 | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 21 | | | | | | | | | |

Figure 3-12: Specifying arguments for the PMT function



Generate an IF Statement Formula

- 1. Select a cell where you want the formula result.
- 2. Type the equal sign and then the word IF.



You could also use the Function Wizard to help create an $\bot F$ statement. Excel considers $\bot F$ statements a logical function that contains three arguments. The first argument determines whether a specified condition is met. If the condition is met (or TRUE), then the function returns the value specified in the second argument; if the condition is not met (or FALSE), then it returns the values specified in the third argument.

- 3. Type an open parenthesis (.
- **4.** Begin the first argument by referencing the cell you want to check. For example, if you want to check that cell B10 is greater than 100, type **B10**.
- **5.** Type an operator such as equal to (=), greater than (>), or less than (<) and then the value you want to compare.
- **6.** Type a comma to begin the second argument.
- 7. Type what you want Excel to do if the first argument is true. If you want Excel to display a value or cell value, type the value or cell reference, but if you want Excel to display text, enclose the text in quotation marks. (See Figure 3-13.)
- **8.** Type a comma to begin the third and final argument.
- *9.* Type what you want Excel to do if the first argument is not true.
- **10.** Press Enter. Excel displays the results of the analysis in the selected cell. In Figure 3-14, you see the result of No in cell B8 because the payment amount was not less than the limit.

| - X V A =0 (05 <a< th=""><th></th><th></th><th>22.20</th><th>0 · A · 5</th><th></th><th></th><th></th><th></th></a<> | | | 22.20 | 0 · A · 5 | | | | |
|--|--|--|---|---|--|---|---|--|
| | | | 1.12 | | | | | |
| A | 8 | C | D | E | F | G | H | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| payment amount | \$943.56 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | =IF(B5 <a10,"yes< td=""><td>","No")</td><td></td><td></td><td></td><td></td><td></td><td></td></a10,"yes<> | ","No") | | | | | | |
| | Pippes the links & the | e) [value if fa | disc () | | | | | |
| \$800 | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| the second second second | 4 | | | 17. | | | | |
| | oan amount monthly interest rate # of payments ayment amount Can I afford this? My Limit - \$800 | why interest rate 0.42% of payments 60 ayment smouth \$943.56 Can I afford this? =IF(85 <a10,"yes< td=""> Wy Limit - (Ploce the Unit of the Canada and the</a10,"yes<> | w) treet / grach 0.42% of payments 60 ayment smouth \$943.56 Can I afford this? =IF(85 <a10,"yes","no")< td=""> (Planet fine, (Mer. 2 = 5) (Wer. 2 for the fine, (Mer. 2 = 5) (Wer. 2 = 5) (Wer. 2 for the fine, (Mer. 2 = 5) (Wer. 2</a10,"yes","no")<> | w) thereal / (reference) 0.42% of payments 60 sayment amount \$943.56 Can I afford this? =IF(85 <a10,"yes","no")< td=""> My Limit - [Plotes too, lobe f >s) (reference) \$800 \$800</a10,"yes","no")<> | white rest rate 0.42% of payments 60 sayment amount \$943.56 Can I afford this? =IF(B5 <a10.*yes*_*no*)< td=""> Vy Limit - [Prove trix_board of begins of take]] \$8000 [Prove trix_board of begins of take]]</a10.*yes*_*no*)<> | why interest rate 0.42% of payments 60 sayment amount \$943.56 Can I afford this? =IF(B5<<10."Yes", "No") | w) 19eet1 / grants / gran | w) thereil (shee: 2 beet) / 0.42% e of payments 60 sayment amount 5943.56° |

Figure 3-13: Entering IF statement arguments

| 1 | 144 L 4 4 7 H | 4.52 | HΣ | ·11:11 III (1) | ion | | | | |
|-------------|-----------------------|-----------------|----|----------------|-----|---|---|---|---|
| A 11 | - 10 - B.J | | | | | | | | |
| | | 430,"Yes",7907) | | | | | - | - | _ |
| - | A | В | C | D | E | F | G | H | |
| 1 | | | | | | | | | |
| 2 | Ioan amount | \$50,000 | | | | | | | |
| 3 | monthly interest rate | 0.429 | | | | | | | |
| 4 | # of payments | 6 | | | | | | | |
| 5 | payment amount | \$943.56 | | | | | | | |
| 6 7 | | | | | | | | | |
| | | | 1 | | | | | | |
| 8 | | No | 1 | | | | | | |
| 9 | My Limit - | | | | | | | | |
| 10 | \$800 | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 16 | - | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| | ···//seet1/9662Ziberd | | | | | | | | |

Figure 3-14: The results of a statement that was not true

28

Troubleshoot Formula Errors

- 1. Select the cell with an error message. A Smart Tag, like the one in Figure 3-15, appears.
- **2.** Click the Smart Tag. A list of options appears. See Chapter 15 for more information on Smart Tags.
- 3. Depending on the error type, edit the formula as needed:
 - **DIV/0!**: Divide by zero error. This error means the formula is trying to divide by either an empty cell or one with a value of zero. Make sure all cells referenced in the division have a value other than zero in them.
 - **#VALUE!:** This error means the formula is referencing an invalid cell address. An example might be if text is in a cell and the formula is expecting a value. You may also see this error if you delete a value in a cell that was used in a formula. Locate and correct the invalid cell reference.
 - NAME#: This error occurs when Excel doesn't recognize text in a formula, perhaps from a misspelling of a range name. Make sure the text name actually exists and is spelled correctly. Also verify the spelling of the function name to make sure it is accurate.
 - **Circular:** This means that the formula in a cell is referring to itself. Locate the circular reference and edit the formula so it does not include itself. Figure 3-16 shows a circular reference.

| _ | |
|----|----|
| [| |
| 10 | 9) |
| N | _ |

To help determine the nature of the problem or where the problem originates, click the drop-down arrow on the Smart button and click Show Calculation. Steps display the logic behind the formula.

| | 97 🐱 | 10 . B / U | | 21 3 24 1 | (日日) 東京(二・ | a. 4. | | | | |
|----|---------------|--------------------|---|-----------|------------|-------|---|---|---|------|
| - | A | B | C | D | E | F | G | н | T | 17 |
| 1 | | | - | | | | - | | | |
| 2 | Red | 45 | | #DIV/0! | =B2/B7 | | | | | |
| 3 | Blue | 71 | - | #NAME? | =B3*RATIO | | | | | |
| 4 | Yellow | 34 | | #VALUE! | =84*A8 | | | | | |
| 5 | Green | 104 | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | Ratio | 1.2 | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | _ |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | - |
| 22 | . w. theet3 / | Peaks / Streets 7. | - | | | 14.5 | | - | | - 34 |

Figure 3-15: Click the Smart Tag to display the error type

| 1 | ile (611) 2 -11 - | and the second second second | And the second second | Data Window | E-414149 | 10 10m ÷ # | | | a normality for | 0 3 |
|------|-----------------------|------------------------------|-----------------------|-------------|----------|-------------|---|---|--|-----|
| And | | - 10 - B / | V # # # | 38 4 4 1 1 | (山)東東上 | · > · 4 · = | 1 | | | |
| | 68 × | A +06/06 B | C | D | E | F | G | н | 1 | 17 |
| 1 | | | | | | | - | | | |
| 2 | Red | 45 | | | | | | | | |
| 3 | Blue | 71 | | | | | | | | |
| 4 | Yellow | 34 | | | | | | | | |
| | Green | 104 | | | | | | | | |
| 6 | | 254 | | - | | | | | | |
| 7 | | | | And a | | 100 | | | | |
| 8 | Ratio | 0 | 1 | 1 beach | 118 | 5% | | | | |
| 9 | | - | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | _ |
| 21 | | | | | | | | | | |
| 22 | - | Sheet2 / Manit | | | | (Int | | | | |
| 1.00 | | Shapes - Joseph Shapes | | | | | | | and the second s | 201 |

Figure 3-16: A formula referring to its own cell address

Audit Formulas

1. Choose Tools≓>Formula Auditing=>Show Formula Auditing Toolbar. Excel displays the Formula Auditing toolbar. (See Figure 3-17.)



Pause the mouse over each tool to see its function.

- 2. Select a cell.
- **3.** To trace where formulas refer to the selected cell, click the Trace Dependents icon. Blue tracer arrows like the ones you see in Figure 3-18 appear on the screen. The arrows indicate that both cells B6 and B9 use the value in cell B2.



Red arrows indicate cells that cause errors and a black arrow points from the selected cell to a worksheet icon if the selected cell is referenced by a cell on another worksheet or workbook.



30

Dependent cells are those that contain formulas that refer to other cells. Precedent cells are those that are referred to by a formula in another cell.

- **4.** Click the Remove Dependent Arrows icon to remove the dependent tracer arrows.
- *5.* Select the cell that contains the formula for which you want to find precedent cells.
- **6.** Click the Trace Precedent icon. Arrows appear indicating which cells are used in the selected formula cell.
- **7.** Click the Remove Precedent Arrows icon to remove the precedent tracer arrows.
- **8.** To close the Formula Auditing toolbar, choose Tools → Formula Auditing → Show Formula Auditing Toolbar.

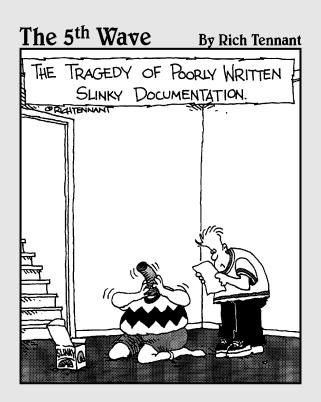


Figure 3-17: The Formula Auditing toolbar

| | . 10 | | # N.N.3 | 日本生,当 | 出现第二 | 3.A. | | | | |
|-----------|---------------------------------------|---------------------------------------|--|--|--|--|--|--|---|---|
| | | B | C | D | F | F | G | н | 1 | J |
| | | | ~ | | | | ě | | | |
| Red | 1. | 45 | | | | | | | | |
| Blue | 1 | 71 | | | | | | | | |
| Yellow | | 34 | 200 | NAME AND DESCRIPTION OF | | 121 | | | | |
| Green | - 1 | 104 | 1.5 | 22.46 | 外田田田 | D M D | | | | |
| | 1 | 254 | | | | | | | | |
| | 11 | | | | | | | | | |
| Ratio | | 1.2 | | | | | | | | |
| Value | | 304.8 | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| H\Sheet3. | inet. | /sheet)/ | 1.1.1 | | | 141 | _ | | | |
| | A A A A A A A A A A A A A A A A A A A | A A A A A A A A A A A A A A A A A A A | 2 • A 15 A B Red • 455 Blue • 71 Yellow 34 Green • 104 254 Ratio • 1.2 Value • 304.8 */deets / Street 2 / Street 3 / Street | 2 × A /5 A B C Red 45 Blue 71 Yellow 34 Green 104 254 Ratio 1.2 Value 304.8 */datts / Street / / | 22 → A MS A B C D Red ¥ 45 Blue 71 Yellow 34 254 Ratio 1.2 Value 304.8 *\street / (street / /street / | 22 → A /35 A B C D E Red 45 Blue 71 Yellow 34 104 254 Ratio 1.2 Value 304.8 *\\\$beet1 / Seet2 / Seet2 / | 2 × A ¹⁵ A B C D E F Red 455 Blue 71 Yellow 34 104 254 Ratio 1.2 Value 304.8 *\detty / Sect2 / Sect2 / Sect2 / 14 | 2 A B C D E F G Red 455 71 F G Blue 71 104 S S S Yellow 34 S S S S Ratio 1.2 304.8 | 2 A B C D E F G H Red 45 71 F G H Yellow 34 Second Herein Second Herein 254 254 Ratio 1.2 Value 304.8 | 2 A B C D E F G H I Red 45 71 Immediate the ten Immediate the ten Immediate the ten Yellow 34 Immediate the ten Immediate the ten 254 254 Immediate the ten Immediate the ten Ratio 1.2 304.8 |



Part II Sprucing Up Your Spreadsheet



| Chapter 4: Formatting Cells and Data | 33 |
|--------------------------------------|----|
| Align Data | |
| Format Values | |
| Indent Data in Cells | 35 |
| Create a Title by Merging Cells | 35 |
| Select Font Attributes | |
| Wrap Text in a Cell | |
| Rotate Text | |
| Work with Date Formats | |
| Adjust Column Width | |
| Change Row Height | |
| Copy Formatting | |
| Use AutoFormats | 40 |
| Manage Formatting Styles | |
| Chapter 5: Adding Color and Graphics | 43 |
| Use Font Color | 44 |
| Apply Shading to Cells | |
| Place Borders Around Cells | |
| Specify Conditional Formatting | |
| Illustrate with Arrows | |

| Make Objects 3-Dimensional | 50 |
|-----------------------------------|----|
| Insert Saved Images | |
| Add Clip Art | |
| Manipulate Graphics | |
| Chapter 6: Working with Workbooks | 53 |
| Insert Additional Worksheets | 54 |
| Delete Worksheets | |
| Copy Worksheets | 55 |
| Rename Worksheets | 55 |
| Change Worksheet Tab Colors | 56 |
| Hide and Unhide Worksheets | 56 |
| Hide Rows or Columns | 57 |
| Redisplay Rows or Columns | 57 |
| Unlock Cells | |
| Relock Cells | |
| Protect Worksheets | 59 |
| Create File Passwords | 60 |
| Generate a Reference to Another | |
| Worksheet | 60 |
| Include a Reference in a Formula | 61 |
| Cross-Reference Other Workbooks | 62 |
| Insert a Hyperlink | 63 |

Formatting Cells and Data

Whoever said "Looks aren't everything" didn't stare at an unformatted Excel spreadsheet. Columns often aren't wide enough, fonts are too small to read, dates display in an unusual manner, and when you have columns of data stacked next to each other, sometimes the information begins to overlap.

Fortunately, Excel includes a plethora of features to make your data look more presentable and easier to read. Here are some of the Excel formatting features you'll discover in this chapter:

- The ability to change the font type, size and style of text, values, or dates.
- Change the alignment of data in a cell from the standard left aligned for text and right aligned for values or dates.
- Create titles using the Excel Merge and Center button.
- Change column width and row heights.
- The ability to use Excel's predefined AutoFormats.
- The use of styles for report consistency.

Chapter 4

Get ready to. . .

| ⊶ Align Data | 34 |
|----------------------------|----|
| ➡ Format Values | 34 |
| ➡ Indent Data in Cells | 35 |
| | 35 |
| ➡ Select Font Attributes | 36 |
| ₩ Wrap Text in a Cell | 36 |
| ➡ Rotate Text | 37 |
| we Work with Date Formats | 37 |
| ⊶ Adjust Column Width | 38 |
| ⊶ Change Row Height | 39 |
| | 40 |
| we Use AutoFormats | 40 |
| → Manage Formatting Styles | 41 |

Align Data

- 1. Select the cells you want to align.
- 2. Click an alignment button on the Formatting toolbar:
 - Left: Lines the data along the left edge of the cell.
 - **Center:** Centers the data in the middle of the cell. If you modify the column width, the data remains centered to the new column width. Cells B4 through F4 are center aligned in Figure 4-1.
 - **Right:** Lines the data along the right edge of the cell.



Values formatted as currency or commas can only display as right aligned.

Format Values

- 1. Select the cells containing values you want to format.
- **2.** On the Formatting toolbar, click the Currency Style, Percent Style, or Comma Style button. Figure 4-2 shows values in column B, C, and D in Comma Style; column E is in Currency Style; and column F is in Percent Style.



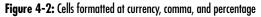
Cells displaying ###### indicate the cell is not wide enough to display the complete number. Widening the column displays the number.

3. To remove digits to the right of the decimal point, click the Decrease Decimal button on the Formatting toolbar. Each click removes the number to the far right of the decimal point. Click enough times and the decimal point disappears.

| Anal | | - 0 J 0 | 1111 | 1.6.9.212 | I DR DR | OF AT A E | | | | |
|----------------------|--------------------------------|--|-----------|-------------|-----------|------------|---|---|----|-----|
| - | A | В | C | D | E | F | G | н | Ĩ. | 1 3 |
| 123 | ABC Corporate Income Statem | 0/k | | | | | | | | |
| 4 | Г | January | Fabruary | March | Totais | Raso | | | | |
| 5 | Revenues. | a la | | 24117-24100 | | | | | | |
| 6 | East | 42975.2 | 49421 25 | 56834 43 | 149230.88 | 0.33268771 | | | | |
| 7 | West | 37485 35 | 43107.75 | 49573.91 | 130167.01 | 0 29018769 | | | | |
| 8 | North | 28994 14 | 33343 1 | 38344.5 | 100681.74 | 0 22445474 | | | | |
| 9 | South | 19721.64 | 22679.15 | 26081.02 | 68481.81 | 0 15266985 | | | | |
| 10 | Total Revenue | 129176.33 | 148551 25 | 170833.86 | 448561.44 | | | | | |
| 12 | Expenses | | | | | | | | | |
| | Supplies | 32567.61 | 37452.05 | 43069 85 | 113089 51 | 0 38839757 | | | | |
| | Wades | 8440.25 | 9706 | 11161.9 | 29308 15 | 0.10065668 | | | | |
| | Office Expent | 980.98 | 1127.4 | 1296 | 3404 38 | 0.01169209 | | | | |
| 16 | Litabes | 1123 77 | 1291.45 | 1485.16 | 3900.38 | 0.01339557 | | | | |
| 17 | Auto Expense | 1794 54 | 2063.1 | 2372 56 | 6230.2 | 0.02139718 | | | | |
| 18 | Other | 420.91 | 483 | 555 45 | 1459.36 | 0.00504200 | | | | |
| 19 20 | Total Expense | 453,28.06 | 52123 | 59940 92 | 157391 98 | | | | | |
| 21 22 23 | Net Profit | 83848 27 | 96428-25 | 110692.94 | 291169.46 | | | | | |
| 23 24 25 26 | | | | | | | | | | |

Figure 4-1: Text and values center aligned

| dend 1 | - 72 - 18 J | r u | | CONTRACTOR OF | × | | | | |
|--------------|---|-----|------------|---------------------------------------|-------------|--------------|-------|------|------|
| | A | - | 8 | C. | D | E | F | G | -13 |
| 1 | ABC Corporation | - | | | | | | | |
| 2 | Income Statement | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | - | J | anuary | February | March | Totals | Ratio | | |
| 5 | Revenues | | | and the property of the second second | | T. BOUNDAL | | | |
| 6 | East | | 42.975.20 | 49,421.25 | 56.834.43 | \$149,230.88 | 30% | | |
| 7 | West | 1 | 37.485.35 | 43,107,75 | 49,573.91 | \$130,167.01 | 26% | | |
| 8 | North | | 28,994.14 | 33,343.10 | 38,344.50 | \$100,681.74 | 20% | | |
| 9 | South | | 49,722.00 | 42,984.00 | 26.081.02 | \$118,787.02 | 24% | | |
| 10 | Total Revenues | | 159,176.69 | 168,856.10 | 170,833.86 | \$498,866.65 | | | |
| 11 | | | | | | | | | |
| 12 | Expenses | | | | | | | | |
| 13 | Supplies | | 32,567.61 | 37,452.05 | 43,069.85 | \$113,089.51 | | | |
| 14 | Wages | | 8,440.25 | 9,706.00 | 11,161.90 | \$ 29,308.15 | | | |
| 15 | Office Expense | | 980.98 | 1,127.40 | 1,296.00 | \$ 3,404.38 | | | |
| 16 | Utilities | | 1,123.77 | 1,291.45 | 1,485.16 | \$ 3,900.38 | | | |
| 17 | Auto Expense | | 1,794.54 | 2,063.10 | 2,372.56 | \$ 6,230.20 | | | |
| 18 | Other | | 1.420.00 | 1,783.00 | 1.555.00 | \$ 4,758.00 | | | |
| 19 | Total Expenses | | 46,327.15 | 53,423,00 | 60,940.47 | \$160,690.62 | | | |
| 20 | | | 2 | | | | | | |
| 21 | Net Profit | | 112.849.54 | 115,433.10 | 109.893.39 | 338,176.03 | | | |
| 22 | A Quett (Danc) / Shad | 1.2 | | | (14) | | | | 1.00 |
| 77 I Oran | a a) theat (/ theat) / theat - AutoShapes - A | | | | -casi | | - | | |
| | | | | | The set and | | | 1434 | |



Indent Data in Cells

- 1. Select the cells you want to indent.
- 2. Click the Increase Indent button on the Formatting toolbar. Notice in cells A6 through A9 and A13 through A18 of Figure 4-3 that each Increase Indent click adds a small amount of space between the cell border and the data itself. How Excel indents depends on how you format the cell:
 - If the data is left aligned: Excel indents to the left.
 - If the data is right aligned: Excel indents to the right.
 - If the data is centered: With the first click, Excel indents to the right, but subsequent clicks cause Excel to move the data to the left.



Click the Decrease Indentation button to remove indentation.

Create a Title by Merging Cells

- 1. Select the cell containing the data you want to merge and the cells you want to include in the merge. The data cell must be in the left cell of the selection and the other cells cannot contain data as shown in Figure 4-4.
- **2.** Click the Merge and Center button. All the selected cells merge into one larger cell and the data is centered.



After clicking Merge and Center, you can left or right align the cell if you don't want it centered.

Click the Merge and Center button again to unmerge the cells from each other.

| And . | - 12 - 18 | 「以圖書書記」 | | × | | | | |
|-------|---------------------|-----------------------|------------|------------|--------------|-------|---|-------|
| | A | В | C | D | E | F | G | 15 |
| 1 | ABC Corporation | | | | | | | |
| 2 | Income Statement | | | | | | | |
| 3 | | | | | | | | |
| 4 | | January | February | March | Totals | Ratio | | |
| | Revenues | a state of the second | | | | | | |
| 6 | East | @ 42,975.20 | 49,421.25 | 56.834.43 | \$149,230.88 | 30% | | |
| 7 | West | 37,485.35 | 43,107,75 | 49,573.91 | \$130,167.01 | 26% | | |
| 8 | North | 28,994.14 | 33,343.10 | 38,344.50 | \$100,681.74 | 20% | | |
| 9 | South | 49,722.00 | 42,984.00 | 26.081.02 | \$118,787.02 | 24% | | |
| 10 | Total Revenues | 159,176.69 | 168,856.10 | 170,833.86 | \$498,866.65 | | | |
| 11 | | | | | | | | |
| 12 | Expenses | | | | | | | |
| 13 | Supplies | 32,567.61 | 37,452.05 | 43,069.85 | \$113,089.51 | | | |
| 14 | Wages | 8.440.25 | 9,706.00 | 11,161.90 | \$ 29,308.15 | | | |
| 15 | Office Expense | 980.98 | 1,127.40 | 1,296.00 | \$ 3,404.38 | | | |
| 16 | Utilities | 1,123.77 | 1,291.45 | 1,485.16 | \$ 3,900.38 | | | |
| 17 | Auto Expense | 1,794.54 | 2,063.10 | 2.372.56 | \$ 6,230.20 | | | |
| 18 | Other | 1,420.00 | 1,783.00 | 1.555.00 | \$ 4,758.00 | | | |
| 19 | Total Expenses | 46,327.15 | 53,423,00 | 60,940.47 | \$160,690.62 | | | |
| 20 | | This M | | | | | | |
| 21 | Net Profit | 112.849.54 | 115,433.10 | 109.893.39 | 338,176.03 | | | |
| 27 | F Guert Conut / One | 124 | | (14) | | | | - mil |

Figure 4-3: Indenting helps set data apart from other cells

| Anal | - H | | D J U | | | , | \$ 1.21 | a, | 18 IR | A-A-A | | | | | |
|----------|---------------|------|---------------|----|-----------|------|---------|-----|---------|----------|---|---|----|---|-----|
| | A | | в | | C | | D | 1 | E | F | G | н | I. | 1 | 3 |
| 1 | | _ | | | ABCIOS | tpo | dion . | | | | | | | | |
| 2 | Incomé Staten | Λė/\ | t: | _ | | | | | _ | | | | | | |
| 34 | | | in the second | | | | 10-10 | | Totals | | | | | | |
| 5 | Revenues. | 116 | January | 1 | ebruary | | Merch | | TODALS | Rapo | | | | | |
| 6 | East | ÷ | 42.975 | ÷ | 49.421 | 3 | 56.834 | ŝ | 149,231 | 33% | | | | | |
| 7 | West | 5 | 37,485 | ŝ | 43,108 | 1 | 49,574 | \$ | 130,167 | 29% | | | | | |
| 8 | North | ÷. | 28.994 | 1 | 33,343 | ŝ | 38,345 | 8 | 100,682 | 2296 | | | | | |
| 9 | South | ŝ | 19.722 | ÷ | 22.679 | 1 | 26.081 | i i | 68.482 | 15% | | | | | |
| 10 | Total Revenue | ÷ | 129.176 | ŝ | 148,551 | 3 | 170.834 | \$ | 448.561 | (Street | | | | | |
| 11 | | 2 | | | in open i | 12 | | 12 | 110,001 | | | | | | |
| 12 | Expenses | | | | | | | | | | | | | | |
| 13 | Supplies | \$ | 32,569 | \$ | 37,452 | \$ | 43.070 | 5 | 113,090 | 39% | | | | | |
| 14 | Wages | ŝ | 8,440 | \$ | 9,706 | 18 | 11,162 | 3 | 29,308 | 10% | | | | | |
| 15 | Office Expe | \$ | 981 | ş | 1,127 | \$ | 1,296 | \$ | 3,404 | 196: | | | | | |
| 16 | Lititoes | 5 | 1,124 | \$ | 7,291 | \$ | 1,485 | 3 | 3,900 | 1% | | | | | |
| 17 | Auto Expert | \$ | 1.795 | 1 | 2,053 | 5 | 2,373 | \$ | 6,230 | 2% | | | | | |
| 18 | CENN | ÷ | 421 | ş | 483 | \$ | 555 | ş | 1,459 | 1% | | | | | |
| 19 | Total Expense | \$ | 45,328 | \$ | 52,123 | \$ | 59,941 | ş | 157,392 | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | Net Froht | 5 | 83,848 | \$ | 95,428 | - \$ | 110,693 | \$ | 291,169 | | | | | | |
| 22 | - | | | | | | | | | | | | | | |
| 23 | - | | | | | | | | | | | | | | |
| 24 25 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | - 1 |

Figure 4-4: Merging cells together can create a title for your worksheet

Select Font Attributes

- 1. Select the cells you want to format.
- **2.** Click the Font drop-down list. A list of available fonts appears, as shown in Figure 4-5. By default, an Excel worksheet uses an Arial 10 point font.
- **3.** Select the font you want to use. Excel displays the selected cells in the chosen font.
- **4.** Select the font size you want to use from the Font Size drop-down list.
- **5.** Click any combination of the Bold, Italic, or Underline buttons on the Formatting toolbar.



Click the Bold, Italic, or Underline button a second time to remove the attribute.

Wrap Text in a Cell

- 1. Select the cells you want to format.
- 2. Choose Format Cells. The Format Cells dialog box appears.
- 3. Click the Alignment tab.
- 4. Select the Wrap Text check box from the Text Control area.
- **5.** Click OK. In Figure 4-6, you see cells (A10 and A19) with the text wrapped.



Selecting the Shrink to Fit option instead of the Wrap Text option allows Excel to automatically change the font size of the selected cell, which forces the data to fit in the cell's current width. Use caution with this option; the text may become unreadable.

| The C | entury Schooli | | B 7 U | 쎿 | | - 5 | 26. 8. 24. | <u>a)</u> | S. S | »· 4· | | | | |
|-------|----------------------|------|----------------|----|----------|------|------------|-----------|---------|-------|---|---|---|------|
| | G Crisiga | 2001 | | 1 | C | r. | D | | E | F | G | H | 1 | 1.1 |
| | G Tunes | | | 14 | ABC Cor | nor | | - | | | | | | |
| | heltPress Trial | | | 10 | Income 5 | | | | | | | | | |
| 10 | lla Iarendon Cond | | | | LACOME 3 | (TO) | ement | | _ | | | | | |
| | tarendon Cond | cus | ed | ÷. | | | in. | | Totals | Ratio | | | | |
| | ooper Black | | - | | ebruary | | March | | 195018 | Found | | | | |
| | OPPERPLAT | EC | SOTHIC E | 34 | 49.421 | | 56,824 | 1 | 149 231 | 3.9% | | | | |
| | OPPERPLAT | | | | 43,408 | 1 | 49.574 | 1 | 130,167 | 29% | | | | |
| .0 | Tenoro | | | | 33,343 | 2 | 38,345 | 2 | 100,682 | 23% | | | | |
| . 0 | ourier | | and the second | 10 | 22.679 | 3 | 26.081 | ्री | (8,482 | 10% | | | | |
| 10 | Total Revenue | 2 | 129,176 | 5 | 148,551 | ŝ | 170.834 | 12 | 448.561 | 1,540 | | | | |
| 11 | (QUE HUNDING) | 7- | 140,110 | | 140,551 | 12 | 110,034 | 1 | 440,203 | | | | | |
| | Expenses | | | | | | | | | | | | | |
| 13 | Supplies | \$ | 32.558 | + | 37.452 | + | 43,070 | ÷ | 113,090 | 39% | | | | |
| 14 | Wages | ÷. | 8,440 | ÷ | 9,700 | 1 | 11.102 | 14 | 29.308 | 1096 | | | | |
| 15 | Office Expe | \$ | 981 | 8 | 1.127 | 18 | 1,290 | 12 | 3,404 | 196 | | | | |
| 16 | Libsbos | 8 | 1.174 | 1 | 1,291 | 10 | 1,485 | ंड | 3.900 | 195 | | | | |
| 17 | Auto Expert | s | 1,795 | 4 | 2,063 | 8 | 2,373 | | 6,230 | 205 | | | | |
| 18 | Other | \$ | 421 | \$ | 483 | . 6 | 555 | -8 | 1,459 | 1%6 | | | | |
| 19 | Total Expense | \$ | 45,328 | \$ | 52,123 | \$ | 59,941 | 18 | 157,392 | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | Net Profit | Ŷ | 83,848 | 4 | 96,428 | \$ | 110,893 | + | 201,109 | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | 1.1 |
| | H\theet1/Ox | 612 | /smeth/ | | | | | | | Je. | _ | - | - | - 61 |

Figure 4-5: Dress up your worksheet with different fonts, sizes, and attributes

| - | • P | | B / U | | | \$ | M. 1. 12. | <u>a</u>) | ** | 3·4·21 | | | | |
|----|----------------|------|----------|-----|----------------|-----|-----------|------------|------------|--------|---|---|---|-----|
| | A | | 8 | | C | | D | | E | F | G | H | 1 | 1 |
| 1 | 1 | | | A | BC Cor | po | ration | | | | | | | |
| 2 | | | 1 | In | come S | ita | tement | t | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | | - 4 | lanuary | F | ebruary | | March | | Totals | Ratio | | | | |
| 5 | Revenues | | | | | | | | | | | | | |
| 6 | East | \$ | 42,975 | 4 | 49,421 | \$ | \$6,834 | \$ | 149,231 | 35% | | | | |
| 7 | West | \$ | 37,485 | \$ | 45,108 | 1 | 49,574 | \$ | 130,167 | 29% | | | | |
| 8 | North | 9 | 28,994 | 1 | 33,343 | 4 | 38,345 | \$ | 100,682 | 22% | | | | |
| 9 | South | \$ | 19,722 | 5 | 22,679 | 5 | 26,081 | .5 | 68,482 | 1594 | | | | |
| | Total | | | | | | | | | | | | | |
| 10 | Revenues | \$ | 129,176 | \$ | 148,551 | 3 | 170,834 | - 8 | 448,561 | | | | | |
| 11 | | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | | |
| 13 | Supplied | 5 | 32,568 | 5 | 37,452 | 1 | 43,070 | 1 | (13,090 | 3.9% | | | | |
| 14 | Wagas- | \$ | 8.440 | \$ | 9,706 | \$ | 11,162 | \$ | 29,308 | 10% | | | | |
| 15 | Office Expl | \$ | 981 | 4 | 1,327 | 4 | 1,296 | \$ | 3,404 | 196 | | | | |
| 16 | Utinhes | \$ | 1.124 | 1 | 1,291 | 12 | 1.485 | \$ | 3,900 | 1% | | | | |
| 17 | Auto Exper | 4 | 1.795 | 4 | 2,068 | 4 | 2.373 | 4 | 6.230 | 2% | | | | |
| 18 | Other | \$ | 421 | 1.5 | 483 | 1 | 655 | 15 | T 459 | 196 | | | | |
| | Total | | | | | | | | | | | | | |
| 19 | Expenses | \$ | 45,326 | 4 | 52,125 | 4 | 59,941 | | 157,392 | | | | | |
| 20 | - | 1 | | 1 | | | | | | | | | | |
| 21 | Net Profit | \$ | 83.846 | 4 | 96,428 | \$ | 110,893 | 5 | 291,169 | | | | | |
| 22 | | 2 | | 22 | and the second | 12 | | | An in case | | | | | |
| | W Sheet 3 / Sh | est. | /sreet3/ | | | - | | | | 10 | | | | 234 |

Figure 4-6: Worksheet cells with wrapped text

Rotate Text

- 1. Select the cells you want to format.
- 2. Choose Format Cells to display the Format Cells dialog box.
- **3.** On the Alignment tab, in the Orientation section, drag the small red arrow to indicate the rotation you want for your selected cells.
- **4.** Click OK. Figure 4-7 shows cells (B4 through D4) with text rotation.

Work with Date Formats

- 1. Select the cells you want to format.
- 2. Choose Format Cells to display the Format Cells dialog box.
- **3.** Click the Number tab. As you see in Figure 4-8, you can select many different value formats.
- 4. Click Date.
- *5.* Select a date format from the Type list. Notice how the sample box displays how your data will look with the selected formatting.



If none of the date styles are what you want, you can create a custom date by clicking Custom from the Category list. Then in the Type box, type how you want the date displayed. Use **m** for month, **d** for day, and **y** for year. If you type **m**, Excel displays the month number. If you type **mm**, Excel displays the month number with a leading zero. If you type **mmm**, Excel displays the month in abbreviated form such as **Feb**. If you type **mmmm**, Excel displays the month spelled out in its entirety (**February**). Keep an eye on the Sample box to view how Excel displays the customized date formats.

| | ionesitEscal Ba ila Edil View | In | | | Tools Data | | Vindew He | | ar en antre | Inn and | | ~ | | |
|----------|----------------------------------|-----|-----------------------|-----|-----------------------|-----|-----------|-----|-------------|---------|---|----|-------|-----|
| Aud | | _ | and the second second | | and the second second | \$ | | | | · - 4 - | | | | |
| | si + | ß, | March | _ | | | - | | - | | | | | |
| | A | | B | | C | | D | - | E | F | G | H. | 1 | 1-1 |
| Ŧ. | | | | A | BC Cor | po | ration | | | | | | | |
| 2 | | | 2 | In | come S | ita | temen | t | | | | | | |
| 3 | | | | | | | | | | | | | | |
| Ť | 1 | 1- | A | - | the state | - | 1.1 | 1 | | | | | | |
| | 1.00 | | Januari | | Februard | | March | | Totals | Ratio | | | | |
| 4 5 | Revenues | - | 3 | - | | - | | 1 | tores | Ratio | | | | |
| 6 | East | \$ | 42,975 | 3 | 49,451 | 3 | 56,834 | 1 | 149,231 | 2346 | | | | |
| 7 | West | \$ | 37,685 | 18 | 43,108 | 8 | 48.574 | ÷. | 130,167 | 29% | | | | |
| 8 | North | 8 | 28,994 | 4 | 33,343 | \$ | 38,345 | 18 | 100,682 | 22% | | | | |
| 9 | South | 6 | 19,722 | 5 | 22,679 | 5 | 26,081 | - 1 | 65,482 | 1896 | | | | |
| | Total | 1 | | | | | | | | | | | | |
| 10 | Revenues | \$ | 129,376 | \$ | 148,551 | \$ | 170,834 | - | 448,569 | | | | | |
| 11 | | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | | |
| 13 | Supplies | \$ | 32,568 | 14 | 37,452 | 1 | 43,070 | :\$ | (13,090 | 39% | | | | |
| 14 | Wages | \$ | 8,440. | 1.5 | 9,706 | 18 | 11,162 | -8 | 29,308 | 10% | | | | |
| 15 | Office Expl | ş. | 981 | \$ | 1,127 | 4 | 1,296 | -\$ | 3,404 | 196 | | | | |
| 16 17 | Unitria | \$ | 1,124 | \$ | 1,291 | \$ | 1,485 | Ŧ | 3,900 | 19= | | | | |
| 17 | Auto Experi | ξ. | 1,795 | 3 | 2,083 | 1 | 2,373 | \$ | 6,230 | 296 | | | | |
| 18 | Other | φ. | 421 | 4 | 483 | \$ | 655 | ्र | 1.459 | 3.06 | | | | |
| -0 | Total | | | | | | - | | 100.000 | | | | | |
| 19 20 | Expenses | ۶. | 45,328 | \$ | 52,123 | * | 59,941 | 1.5 | 157,392 | | | | | - |
| 20 | WAtherts / Ch | 112 | Isreet37 | - | | - | | - | | 1el | | | | ad |
| Dear | | | | 0 | 1400 | i.a | 15.2. | | | | | | | |
| 1000 | | - | | - | | - | - | | | | | | 14.84 | |

Figure 4-7: Rotating text adds a special effect to your worksheet

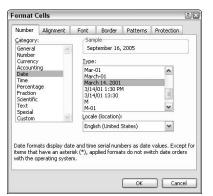


Figure 4-8: Applying date formatting

6. Click OK to apply the format.

Adjust Column Width

- 1. Highlight the columns you want to change.
- 2. Choose a method to adjust column width:
 - To manually change the width of one column, position the mouse on the right boundary of the column heading until the mouse turns into a black bar with arrowheads pointing right and left. Drag the boundary bar left or right until the column is the width that you want. In Figure 4-9, I've expanded column A.
 - To set column width to a specific setting, click anywhere in the column you want to modify, and then choose Format Column Width. The Column Width dialog box, shown in Figure 4-10, appears. Type the exact width you want; then click OK.



Excel displays cell width in characters and pixels instead of in inches.

• To automatically change the width of the column so it fits the widest entry in the column, double-click the boundary on the right side of the column heading or select the columns; then choose Formats Columns AutoFit Selection.



The default column width is 8.43. To change the default column width on the current worksheet, choose Format=>Column=>Standard Width. Enter the new width; then click OK. All columns, not already manually changed, change to the standard width you specified.

| 1 | ile Láil View | In 1 | wit Form | nî (| Tools Data | . 1 | Yindow Ha | | u si waa | inn end | | | - 11 | m +. | - 11 |
|-------|----------------|---------|------------|------|------------|-----|----------------|-----|---------------|-------------|---|---|------|-------|------|
| e i i | | | B / U | 1.8 | | \$ | 5.1.12 | 4) | ##· | · · 4 · · · | | | | | |
| | A3 - | Ż | + B | - | C | | D | | E | F | G | н | 1 | 1 | |
| 1 | | 7 | - | A | BC Cor | po | ration | | | | | | | | |
| 2 | | | | | come S | 200 | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | Januari | | February | | March | | Totals | Ratio | | | | | |
| 5 6 | Revenues | | 1 | | • | | * | | rotes | Ratio | | | | | |
| 6 | East | \$ | 42.975 | 3 | 49,421 | 3 | 56,834 | | 149,231 | 3346 | | | | | |
| 7 | West | \$ | 37.485 | 1 | 45,108 | 1 | 49.574 | 8 | 130,167 | 29% | | | | | |
| 8 | North | 8 | 28,994 | 1 | 33,343 | \$ | 38,345 | \$ | 100,682 | 22% | | | | | |
| 9 | South | 8 | 19,722 | 5 | 22,679 | 5 | 26,081 | - 1 | 68,482 | 10% | | | | | |
| | Total | | -040° 260 | | | | | | | | | | | | |
| 0 | Revenues | \$ | 129,176 | \$ | 148,551 | \$ | 178,834 | -8 | 448,561 | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | | | |
| 13 | Supplies | \$ | 32,568 | -\$ | 37,452 | 1 | 43,070 | :\$ | (13,090 | 39% | | | | | |
| 14 | Wages | \$ | 8,440 | 18 | 9,706 | 18 | 11,162 | -8 | 29,308 | 10% | | | | | |
| 15 | Office Expl | | 981 | \$ | 1,127 | \$ | 1,296 | - | 3,404 | 196 | | | | | |
| 16 | Similar | \$ | 1,124 | \$ | 1,291 | \$ | 1,485 | Ŧ | 3,900 | 19= | | | | | |
| 17 | Auto Expert | ξ. | 1,795 | 5 | 2,063 | 1 | 2,373 | -\$ | 6,230 | 296 | | | | | |
| 18 | Other | ş. | 421 | 4 | 483 | \$ | 665 | ं | 1.459 | 296 | | | | | |
| | Total | | ar and | | - | 5 | - | 1. | in the second | | | | | | |
| 19 | Expenses | \$ | 45,328 | 3 | 52,123 | \$ | 59,941 | 1.5 | 157,392 | | | | | | |
| Ϋ. | WAtherts / Gu | 100 | /Street3 / | - | | - | | - | | 101 | | | | | Ġ, |
| Denn | | | | n | 1.40.0 | i.a | 15.0 | 1.4 | | | | | | | |
| 144 | - Hillin Secto | - | | | | 1 | And in case of | - | | 1.1.1.1 | | | | 14.82 | |

Figure 4-9: Manually changing column width

| Column Width | 1 🛛 |
|----------------------|--------|
| <u>Column</u> width: | 6 |
| OK] | Cancel |

Figure 4-10: Set a specific column width

Change Row Height

1. Highlight the rows you want to change.



Optionally, select the rows and choose Format=>Row=>AutoFit.

- 2. Choose a method to adjust row height:
 - To manually change the height of a single row, position the mouse on the boundary under the row heading until the mouse turns into a black bar with arrowheads pointing up and down. Drag the boundary bar until the row is the height that you want. In Figure 4-11, I expanded row 10.



Row height is measured in points and depends on the font you are using. The default font of Arial 10 point, uses a default row height of 12.75, but Excel automatically adjusts the row height when you select a font larger than the cell height.

- To set row height to a specific setting, click anywhere in the row you want to modify or highlight the desired rows; then choose Format Row Height. The Row Height dialog box opens, as shown in Figure 4-12. Type the exact height you want; click OK. The row changes to the height you specified.
- To automatically change the height of the row so it fits the tallest entry in the row, double-click the boundary on the bottom of the row heading.



The square to the left of column A and above row 1 is called the Select All square. To change the row height for all rows in the worksheet, click the Select All square and follow the steps to change all rows.

| | resmit Excel Bank 7 | | | | | | | 211 |
|------|--|---------------------------------|--|-------------|--------------|-------|---------------|-----|
| 5.6 | In Edit View Incent Fo | the provider of the contract of | Access of the second | | | | and the other | - 6 |
| dent | 43.131.70 | 0 | | 1 113 12m | 6 | | | |
| | 10 × & Total Res | | 3 / 3 A 4 9 9 | | | | | |
| 2.21 | A | B | C | D | Ë | F | G | 1.3 |
| 1 | | | ABC Corporat | ion | | | | |
| 2 | | | Income Staten | ient | | | | |
| 3 | | | | | | | | |
| | | A | A | 100 | | | | |
| | | CUB! | TOTOR | Watch | TOIBLE | Ratio | | |
| 4 | | 20 | 40 | Su. | 40. | 60 | | |
| 5 | Revenues | | in and | | | | | |
| 6 | East | 42,975.20 | 49,421.25 | 56,834.43 | \$149,230.88 | 30% | | |
| 7 | West | 37,485.35 | 43,107.75 | 49,573.91 | \$130,167.01 | 26% | | |
| 8 | North | 28,994.14 | 33,343.10 | 38,344.50 | \$100,681.74 | 20% | | |
| 9 | South | 49,722.00 | 42,984.00 | 26,081.02 | \$118,787.02 | 24% | | |
| 10 | Total Revenues | 159,176.69 | 168,856.10 | 170,833.86 | \$498,866.65 | | | |
| 11 | | | and a series start | | | | | |
| 12 | Expenses | | | | | | | |
| 13 | Supplies | 32,567.61 | 37,452.05 | 43,069.85 | \$113,089,51 | 23% | | |
| 14 | Wages | 8,440.25 | 9,706.00 | 11.161.90 | \$ 29,308.15 | 6% | | |
| 15 | Office Expense | 980.98 | 1.127.40 | 1.296.00 | \$ 3,404.38 | 1% | | |
| 16 | Utilities | 1,123.77 | 1,291.45 | 1,485.16 | \$ 3,900.38 | 1% | | |
| 17 | Auto Expense | 1,794.54 | 2,063,10 | 2.372.56 | \$ 6,230,20 | 1% | | |
| 18 | Other | 1,420.00 | 1,783.00 | 1,555.00 | \$ 4,758.00 | 1% | | |
| 10. | H Speet J (Steat 2 / Street | AL TOL AL | - 52 122 00 | | 4 160 600 60 | | | |
| Draw | a state of a | CION ADDAL | 10-2-3-B | m er ta a b | | | | 100 |
| - | and the state of t | | Contraction of the local division of the loc | | | | 18.84 | |

Figure 4-11: Changing row height

| Row Height | × |
|-------------|--------|
| Row height: | 25 |
| OK | Cancel |

Figure 4-12: Enter a desired row height

Copy Formatting

- 1. Select a cell that has formatting you want to copy.
- **2.** Click the Format Painter tool on the Formatting toolbar. A marquee surrounds the selected cell and the mouse pointer turns into a paintbrush (see Figure 4-13).
- **3.** Click the cells you want to format. Excel immediately applies formats such as font, size, color, borders, and alignment.



Double-click the Format Painter tool to lock it in so you can paint additional cells without having to reselect the tool. Click the tool again to unlock it.



40

To quickly copy the width of one column to another column, select the heading of the first column, click the Format Painter tool, and then click the heading of the column that you want to apply the column width to.

Use AutoFormats

- 1. Select the spreadsheet data.
- 2. Choose Format AutoFormat. The AutoFormat dialog box appears.
- 3. Select an AutoFormat style.
- **4.** Click the Options button. The AutoFormat dialog box expands as shown in Figure 4-14.
- *5.* Uncheck any AutoFormat formatting options you don't want to use.
- **6.** Click OK. Excel applies the formatting you choose to your selected data.

| 6 7 8 | z to s in a 2C × A Totals A | | в | ±1 | s | 4.4 | 100.001 | | · | 1 | | | | |
|--------------------------------------|-----------------------------------|-----|-----------|-----|---------|------|---|----|---------|------|---|---|---|------|
| 1 2 3 4 5 6 7 8 | | 1 | | | C | | | | | | | | | |
| 2 3 4 5 6 7 8 | A | | | | 0 | | and a local design of the | _ | - | | | | _ | |
| 2 3 4 5 6 7 8 | | | ABC | | M. | _ | D | | E | FI | G | t | 1 | 1 |
| 3 4 5 6 7 8 | | | | C | orporo | tic | n | | | | | | | |
| 4 5 <u>R</u> | | | Incor | ne | State | me | ent | | | | | | | |
| 4 5 <u>R</u> | | | | | | | | | | | | | | |
| 5 <u>R</u> 6 7 8 | | | mart | | Farrant | 1 | | Г | | | | | | |
| 6 7 8 | | | 3300 | | 600° | 1 | wards | 1 | Totals | Rabo | | | | |
| 78 | levenues | | | | | | | - | | | | | | |
| 8 | East | 1 | 42,975 | \$ | 49,421 | \$ | 56,834 | \$ | 149,231 | - | | | | |
| | West | 1.5 | 37 485 | 15 | 43,108 | 18 | 49,574 | 18 | 130,167 | 2096 | | | | |
| 9 | North | - 1 | 28,994 | 5 | 33,348 | 5 | 38,845 | ÷. | 100,682 | 2296 | | | | |
| | South | 4 | 19,722 | 1 | 22,679 | - \$ | 26,081 | ş. | 68,482 | 10% | | | | |
| 10 та 11 | otal Revenues | \$ | 129,176 | \$ | 148,651 | 3 | 170,834 | \$ | 448,561 | | | | | |
| | xpenses | | | | | | | | | | | | | |
| | Supplier | 1.5 | 32.588 | 5 | 37.452 | | 43,070 | .8 | 113.090 | 39% | | | | |
| 14 | Wapes | . 5 | 8,440 | .8 | 9,706 | \$ | 11.162 | 5 | 29.308 | 1096 | | | | |
| 15 | Office Expense | 1.5 | 981 | 15 | 1,127 | 1 | 1,295 | \$ | 3,404 | 1% | | | | |
| | Up/Mes | 1.5 | 1,124 | \$ | 1,291 | 8 | 1,485 | 18 | 3,900 | 106 | | | | |
| | Auto Expense | 5 | 1,795 | \$ | 2,053 | \$ | 2,373 | \$ | 6,230 | 2% | | | | |
| 18 | Other | 4 | 421 | \$ | 485 | - | 555 | \$ | 1,459 | 1% | | | | |
| 19 To 20 | otal Expenses | 3 | 45,328 | 5 | 52,125 | Ŧ | 59,941 | £, | 157,392 | | | | | |
| | (\sheet1/sheet2/sheet | | | | | | | - | 101 | | - | _ | 2 | 3.67 |
| Draw. | AutoShapes | 130 | 3.51 4.62 | 184 | | | A-# | | | | | | | |

Figure 4-13: Copying formatting with the Format Painter tool

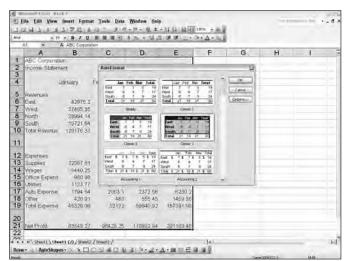


Figure 4-14: Save time with AutoFormat

Manage Formatting Styles

- 1. Select a cell with formatting and choose Format Style. Excel displays the Style dialog box shown in Figure 4-15.
- **2.** In the Style Name text box, type a descriptive name for the style such as **category**, **salesperson**, or **heading**.
- **3.** Remove any check marks from the formatting categories you do not want to save with the style. You can retain any combination of formatting for a style including number style, alignment style, font style, border style, pattern style, and whether the cell is protected when the worksheet is protected.
- 4. Click the Add button and then click Close.
- *5.* To apply the styles to worksheet cells, select the cells you want to have the format style.
- 6. Choose Format Style to display the Style dialog box.
- **7.** Select the style you want to use from the Style Name drop-down list (see Figure 4-16).



To remove a style, select the style name and click Delete. Cells formatted with a style revert to the Normal style.

Click the Modify button to change any of the existing format options.

8. Click OK. Excel applies the style you selected.

| - | A | В | C | D | E | F | G | н | |
|------|-----------------------|---------------------|---|------------------------|------------|-----------|---|---|--|
| 1 | a second diversion of | | Corporation | | | | | | |
| 2 | | Incom | e Statemer | it. | | | | | |
| 3 | | | | | | | | | |
| 4 | | January | Style | | | - | | | |
| 5 | Revenues | | | kanoon | - 10 - C | IA. | | | |
| 6 | East | 42976.2 | This is a second a se | Towns a | 1 | Cascal | | | |
| 7 | West | 37485.35 | and the second | Lafe, Stilling Righted | 1 | Sodly | | | |
| 8 | North | 28994.14 | Concerning of the | | - | | | | |
| 9 | South | 19721.64 | Silon | Any IZ, BALVAR 20 | willer _ | -641 | | | |
| 10 | Total Revenues | 129176.33 | Stele | (altimize | | 120081- | | | |
| 11 | | | Entracement | 9vadid - | 12 | Section 1 | | | |
| | and an office | | Periodia | Leased | | | | | |
| 12 | Expenses | | | | Loopen and | - | | | |
| 13 | Supplies Wages | 32567.61 8440.25 | 37452.05 | 43059.85 | 113089.51 | | | | |
| 14 | Office Expense | 980.98 | 1127.4 | 1296 | 3404.38 | | | | |
| | Utilities | 1123.77 | 1291.45 | 1485.16 | 3900.38 | | | | |
| 17 | Auto Expense | 1794 54 | 2063.1 | 2372.56 | 6230.2 | | | | |
| 1.50 | Other | 420.91 | 483 | 555.45 | 1459.36 | | | | |
| 18 | | | | | | | | | |

Figure 4-15: Creating a style

| And | and the second second | NU × B / 1 | | 1 4T + | | 111 MHB | | | | | | |
|-----|-----------------------|------------|----------|------------|---------------|---------------|-----------|---------------|-----|---|---|-----|
| 40 | 64 × | A survey | | 21 3 10 | 1.4.44 | | 1.4. | 14.5 | | | | |
| | A | B | C | D | E | F | G | 1 14 1 | 1 1 | J | K | Ľ |
| 1 | ABC Corps | oration | | | | | | | | | | |
| 2 | theorne Sta | stement | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | Danuary | February | March | Totals | Fapo | | | | | | |
| | Revenues: | | | Cade | _ | | _ | | | | | |
| | East | 42975 | | | | | Trans Vo. | | | | | |
| | West | 37485.3 | | | Acernal | _ | 9 | 10. | | | | |
| | North | 28994 14 | | Si Arrdubi | Categories | - | 100 | Canal | | | | |
| | Seuth | 19721.6- | | Markin | Corma (0) | | 12 | | | | | |
| 10 | Total Revie | 129176.3 | 148551.3 | PAgener | Currency [0] | | 14 | Usully- | | | | - |
| 拉 | Expenses | | - | Filters | Terrol Incent | | | - | | | | |
| | Supplies | 32567.6 | 37452.05 | SCI ONE | inche. | | - 15 | | | | | |
| | Wages | 5440.2 | | Slode | | | | (1988) | | | | |
| | Office Expe | | | Filation | Fan Wundhop | - | - | Hege | | | | |
| | Ubibes | 11237 | | | | | (he | Propagation (| | | | - |
| | Auto Exper | | | Peptertile | biologi e | | | | | | | |
| | Other | 420.9 | 483 | 466.45 | 1459.36 | 0.005012: | | | | | | |
| | Total Expe | | | 59940.93 | 157392 | Sector Sector | | | | | | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | 150 |

Figure 4-16: Select a style name from the list



Adding Color and Graphics

Sometimes, even after adding font and style attributes to cell data, you still need to call extra attention to specific areas. How about adding a little color to the cell data? Or instead of modifying just the data in the cell, how about making alterations such as adding a background color or a border?

And if that's still not enough, you can draw an arrow to point to a specific area. What? You can't draw a straight line? That's not a problem because with Excel, you don't have to be a gifted artist to draw. Whether you want to draw circles, squares, lines, or arrows, Excel provides tools to assist you, making the drawing process fun and easy.

In this chapter, you discover how to

- Add color or lines to text or cells, bringing contrast to particular portions of your worksheet.
- Use Excel's conditional formatting feature. With this function, you can have Excel do the legwork for you when searching for specific criteria and flag you by applying special formatting to the cells containing the criteria you're looking for.
- Draw arrows, shapes, and annotation boxes, all of which you can add depth to with shading and dimension.
- Insert clip art, which is a collection of ready-made computerized graphic illustrations, or your company logo and your viewers will sit up and take notice of your worksheet.

Chapter 5

Get ready to. . .

| → Use Font Color | 44 |
|------------------------------|----|
| Apply Shading to Cells | 44 |
| ➡ Place Borders Around Cells | 45 |
| | 46 |
| ➡ Illustrate with Arrows | 47 |
| Annotate with Text Boxes | 48 |
| ➡ Draw AutoShapes | 49 |
| ➡ Shade Your Drawings | 49 |
| ➡ Make Objects 3-Dimensional | 50 |
| ➡ Insert Saved Images | 50 |
| ⊶ Add Clip Art | 51 |
| Hanipulate Graphics | 52 |
| | |

Use Font Color

- 1. After selecting the cells you want to change the text color, choose Formatt⇒Cells.
- 2. Click the Font tab.
- **3.** Select a color from the Color drop-down list, as shown in Figure 5-1.
- 4. Click OK.



Optionally, click the Font Color icon from the Formatting toolbar (to add data color) or the Fill Color icon (to add color to the cell background).

Apply Shading to Cells

1. After selecting the cells you want to add background cell color to, choose Format⇔Cells.



Optionally, click the arrow next to the Fill Color button on the Formatting toolbar and select from a broad variety of different shading colors. Select No Fill from the options to remove any cell coloring.

2. Click the Patterns tab (see Figure 5-2), select a shading color.



You can add a background pattern to the selected cells by selecting a fill pattern from the Pattern drop-down list. The color box under the pattern choices represent the second color used in the pattern.

3. Click OK.

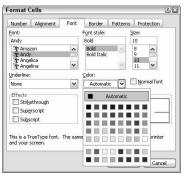


Figure 5-1: Choosing a font color

| lumber | Alignment | Font | Border | Patterns | Protection |
|--------------------|-----------|------|--------|----------|------------|
| el shadi Color: | No Color | | Sample | | |
| | | | | | |

Figure 5-2: Select a color for the cell background



Place Borders Around Cells

- 1. After selecting the cells you want to add a border to, choose Format[⊥]>Cells.
- **2.** Click the Border tab. The Border tab appears (as shown in Figure 5-3).
- **3.** Select a line style from the Style area. Choose from solid lines to dotted, dashed, or double lines. The default option is a thin solid line.
- **4.** Select a color for the cell border from the Color drop-down list. The default color is black.
- 5. Select a Preset option:
 - **Outline:** Place the border around the outside of the selected cell range.

Inside: Place the border along the inside cells of the cell range.



You can optionally select both Outline and Inside to place a border around each individual selected cell.

- **6.** Instead of, or in addition to the Preset options, select any of the options in the Border section to apply a border of a specific type, such as a diagonal, center, or bottom underline.
- 7. Click OK.



Optionally, click the drop-down arrow next to the Border button on the Formatting toolbar. As you see in Figure 5-4, you can select from a number of predefined border styles.



Excel also includes a Tables and Borders toolbar from which you can select border options. Choose View=>Toolbars=>Tables and Borders.

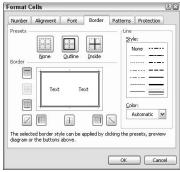


Figure 5-3: Creating border lines for cells

| 10 | icresult Escul Hook 1 He Edit View Insert F He I J J J J J Z 7 IJ | P 12 - 14 | Tools D | ata | (1997) (1 | Holt | | | lans é e | | | | • - 0 |
|----------|---|-----------|--------------|-----|--|------|---------|------|------------|-------|---|---|-------|
| And | - 10 - B / | - | E H H | - | \$ 16. 1 3 | | | | · 4 - | | | | |
| - | A 38343 5 | 1 | 8 | - | C | - | D | 1 | = 10 B. | F | G | н | 1 |
| | 0 | - | | | | | | - | コモニ | E I | 9 | | |
| 1 | | | ABC | C | orpora | tic | m | = | 田口口 | | | | |
| 2 | | | Incor | ne | State | me | ent | J D | aw Berders | | | | |
| 3 | | | | | | | | | | | | | |
| 4 | | F | Tanuary | 21 | February | 1.1 | March | | Tetalo | Fater | | | |
| 5 | Revenues | - | | | | | | | | | | | |
| 6 | East | 2 | 42,975 | \$ | 69,421 | -\$ | 56,834 | 4 | 149,231 | 771. | | | |
| 7 | West | 4 | 37,485 | \$ | 43,108 | -\$ | 49,574 | - 5 | 130,187 | 291 | | | |
| 8 | Warth | \$ | 28,994 | 4 | \$3,343 | \$ | 38,345 | \$ | 106,682 | 22% | | | |
| 9 | South | 18 | 19,722 | 1 | 22,678 | Ť | 26,061 | \$ | 68,482 | 1976 | | | |
| 10 | Total Revenues | 1.5 | 129,176 | 5 | 148,551 | 1 | 170,834 | - 8 | 448.561 | | | | |
| 11 | Contraction Contraction | | 100 cm 10 cm | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | |
| 13 | Suppros | 4 | 32,588 | 4 | 27,452 | 1 | 43.070 | \$ | 113,090 | 711 | | | |
| 14 | Wagan | 1.8 | 8,440 | \$ | 9,716 | 4 | 11,162 | 5 | 29.308 | 18% | | | |
| 15 | Office Expense | 5 | 981 | -\$ | 1,127 | - 8 | 1,298 | - \$ | 3,404 | ÷6. | | | |
| 16 | Libities | - 5 | 1,124 | \$ | 1,291 | -8 | 1,485 | \$ | 8,900 | 12 | | | |
| 17 | Auto Expense | \$ | 1,795 | \$ | 2,063 | - \$ | 2,373 | \$ | 6,230 | 21 | | | |
| 18 | Other | 1.2 | 421 | \$ | 483 | 4 | 665 | ÷ | 1,459 | 12. | | | |
| 19 20 | Total Expenses | 4 | 45,328 | \$ | 52,123 | + | 50,041 | \$ | 157.392 | | | | |
| 21 22 | Net Profit | \$ | 83,846 | \$ | 98,428 | 1 | 110,893 | Ŧ | 291.169 | | | | |
| 23 | NATHENT / Chant / Street | 1 | - | - | | - | - | - | 141 | _ | _ | _ | - 16 |
| Dear | 🕶 < AyloShapes- 👾 🦮 | - | 131412 | 1 | 3 5. | 4. | A·== | # | a a la | | | | |

Figure 5-4: The Border button on the Formatting toolbar



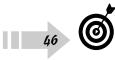
Specify Conditional Formatting

1. Select the cells you want to apply conditional formatting to.



Ideas for using conditional formatting include locating dates that meet a certain condition, such as falling on a Saturday or Sunday, specifying highest or lowest values in a range, or indicating values that fall under or over a specified amount.

- 2. Choose Format^t>Conditional Formatting. The Conditional Formatting dialog box, shown in Figure 5-5, appears.
- **3.** Select the criteria you want to use from the second dropdown list in the Condition 1 area. Criteria options include Equal To, Greater Than, Less Than, and Between.
- **4.** Enter the values you want to reference in the text box. The number of boxes depends on the condition you selected in Step 3. You can type a value here, such as 500, or you can reference a cell address, such as F13.
- *5.* Click the Format button, which displays a modified version of the Format Cells dialog box.
- **6.** Specify the format options you want to apply if the condition you specified is true. You can select from font styles, size, borders, patterns, or background color.
- **7.** Click OK. A sample of your format appears in the Sample area.
- **8.** Click OK to apply the conditional formatting or click Add to save the condition. Figure 5-6 shows formatting options applied to two cells with the specified criteria of being less than 30,000.



To clear conditional formats as well as all other cell formats for selected cells, choose Edit=>Clear=>Formats.



Figure 5-5: Specifying conditions for formatting options

| | ile Edit View Insett | | 12-1 | ala e | | | - 14 (4) (4 | | an in | | | | uting limit | |
|----------|------------------------|-----|---------|----------|------------|-----|-------------|-----|---------|-------|---|---|-------------|------|
| | Bi - A 42975 | | | 21 | 2. 3h 1. 1 | 1.0 | 100.0010 | - | a+4+ | 18 | | | | |
| | A | 1 | в | į | C | | D | | E | F | G | н | 1 | 1 |
| 1 | | | ABC | : 0 | orpora | tic | m | | | | | | | |
| 2 | | | Incot | ne | State | me | nt | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | | T | Tanuary | | February | 1.0 | March | | Totalo | Fatur | | | | |
| 5 | Revenues | - | | - | | | | - | | | | | | |
| 6 | East | 1.5 | 42,975 | 3 | 49,421 | - | 58.834 | 15 | 149,231 | 70% | | | | |
| 7 | West | 4 | 37,485 | 3 | 43,108 | - | 49,574 | ŝ | 130,187 | 265 | | | | |
| 8 | North | 1.2 | 28,994 | 3 | 83,343 | 4 | 38,345 | 8 | 106.682 | 20% | | | | |
| 9 | South | 3 | 49,722 | 1 | 42,984 | | 26,081 | \$ | 118,787 | 24% | | | | |
| 10 11 | Total Revenues | 8 | 159,177 | 1 | 168,858 | 1 | 170,834 | • | 498,867 | | | | | |
| 12 | Expenses | | | | | | | | | | | | | |
| 13 | Supplies | - 4 | 32,588 | 4 | 37,452 | 1 | 43.070 | \$ | 113,090 | 79% | | | | |
| 14 | Wagau | 1.1 | 8,440 | | 9,706 | 18 | 11,182 | 18 | 39.308 | 11- | | | | |
| 15 | Office Expense | 5 | 981 | 18 | 1,127 | 18 | 1,290 | -1 | 3,404 | 45. | | | | |
| 16 | Libities | - 5 | 1,124 | 5 | 1,291 | 18 | 1,485 | - | 0.900 | 155 | | | | |
| 17 | Auto Expense | \$ | 1,795 | \$ | 2,063 | 1 | 2,373 | - | 6,230 | 2%. | | | | |
| 18 | Other | 1 | 421 | \$ | 483 | 4 | 665 | . 5 | 1,659 | 0%. | | | | |
| 19 20 | Total Expenses | \$ | 45,328 | \$ | 52,125 | 1 | 50,941 | \$ | 157.302 | | | | | |
| 21 | Net Profit | \$ | 113,849 | \$ | 116,738 | 1 | 110,863 | Ŧ | 341,475 | | | | | |
| 23 | HAteet3 / cheat2 / She | 107 | | - | - | - | _ | - | 120 | | | | | - 10 |

Figure 5-6: In this example, conditional formatting options included applying a font color change and a background color

Illustrate with Arrows

- 1. Click the Arrow button on the Drawing toolbar. The mouse pointer turns into a small black cross.
- **2.** Click and drag the mouse pointer to draw an arrow, as shown in Figure 5-7.
- **3.** Release the mouse button, and the arrow appears on the worksheet with a white circle at each end indicating the arrow is selected. (See Figure 5-8.)



By default, Excel draws a black arrow with a thin line and small arrowhead. The arrowhead appears at the end of the drawn line.

Click anywhere in the worksheet to deselect the arrow. Click the arrow again to reselect it.

- **4.** Modify your arrow as needed by clicking these buttons on the Drawing toolbar:
 - Arrow Style: Change the arrowhead style or direction
 - **Dash Style:** Change the line style from a solid line to a dashed or dotted line
 - Line Style: Change the arrow thickness
 - Line Color: Change the arrow color



To delete the arrow, click it and press the Delete key on the keyboard.

See the "Manipulate Graphics" section later in this chapter to modify the arrow size, position, or direction.

| Anti | - 10 - 10. 11 - A- | 1.10 | | <u>عا</u> | 15.35 | Li d | BR. | 1 | α+ <u>Δ</u> +Ξ | il i | | | |
|----------|-----------------------|------|---------|-----------|----------|------|---------|----|----------------|--------|---|---|-----|
| | A | 1 | В | | C | | D | | E | F | G | н | 1.7 |
| 1 | | | ABC | c | orpora | tic | m | | | | | | |
| 2 | | | Incor | ne | State | me | nt | | | | | | |
| 3 | | - | 100000 | - | 0000 | | | _ | | _ | | | |
| 4 | | 1.1 | Tennery | | Fabruary | _ | March | - | Totals | Fate | | | |
| 5 | Revenues | | | | | | | | | | | | |
| 6 | East | \$ | 42,975 | 4 | 49,421 | \$ | 58,834 | 4 | 149,231 | 345 a. | | | |
| 7 | West | \$ | 37,485 | 業 | 43,108 | 5 | 49,574 | \$ | 130,187 | 21/5 | ~ | | |
| 8 | North | * | | Ŧ | 38,343 | \$ | 38,345 | 幸 | 100,682 | 2.0% | | | |
| 9 | South | \$ | 49,723 | 8 | 42,984 | \$ | 26,081 | ş | 118,787 | 241. | | | |
| 10 | Total Revenues | Ŧ | 159,177 | 1 | 168,056 | 5 | 170,834 | \$ | 498,867 | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | |
| 13 | Supplies | 5 | 32,568 | \$ | 37,452 | 5 | 43,070 | 9 | 113,090 | 777) | | | |
| 14 | Wages | ÷. | 8,440 | \$ | 9,705 | 18 | 11,162 | -5 | 29,305 | P | | | |
| 15 | Office Expense | 5 | 158 | \$ | 1,127 | 5 | 1,296 | 3 | 3,404 | 1% | | | |
| 16 | Unillies | 5 | 1,124 | 3 | 1,291 | 8 | 1,485 | \$ | 3,906 | 12 | | | |
| 17 | Auto Expense | | 1,795 | \$ | 2,063 | 2 | 2,378 | \$ | 6,230 | 25 | | | |
| 18 | Other | \$ | 421 | \$ | 483 | \$ | 565 | \$ | 1,459 | 42 | | | |
| 19 | Total Expenses | \$ | 45,326 | \$ | 52,123 | \$ | 59,941 | \$ | 157,322 | | | | |
| 20 | 1.11.14 | | | | | | | | | | | | |
| 21 22 23 | Net Profit | 5 | 113,849 | 4 | 116,733 | 5 | 110,893 | 4 | 341,475 | | | | |

Figure 5-7: Drawing an arrow

| U. | nil - A- | | | _ | | _ | | 1 | | - | | | |
|----|----------------|----|---------|----|----------|-----|---------|----|---------|------|---|---|---|
| | A | | В | | С | | D | | E | F | G | н | 1 |
| t | | | ABC | C | orpora | tic | m | | | | | | |
| 2 | | | Incor | ne | State | me | nt | | | | | | |
| 3 | | | *11001 | | 01010 | | | | | | | | |
| 4 | - | 1 | Tennery | | February | - | March | | Totals | Fate | | | |
| 5 | Revenues | 1 | | | | | | | | | | | |
| 6 | Eant | 5 | 42,975 | - | 49,421 | \$ | 58,834 | 5 | 149,231 | | | | |
| 7 | West | 5 | 37,485 | 1 | 43,108 | 5 | 49,574 | 5 | 130,167 | 26 | ~ | | |
| 8 | Narth | \$ | 28,994 | \$ | 33,343 | s | 38,345 | 5 | 100,682 | 20% | | 1 | |
| 9 | South | \$ | 49.723 | \$ | 42.984 | \$ | 26,081 | 5 | 118,787 | 24% | | 0 | |
| 10 | Total Revenues | \$ | 159 177 | \$ | 168,856 | \$ | 170,834 | \$ | 498,867 | | | 9 | |
| 11 | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | |
| 13 | Supplies. | \$ | 32,568 | \$ | 37,452 | \$ | 43,070 | 9 | 113,090 | 777) | | | |
| 14 | Wages | ę | 8,540 | \$ | 9,705 | 1 | 11.162 | \$ | 29,308 | 15- | | | |
| 15 | Office Expense | 5 | 981 | ş | 1.127 | \$ | 1,296 | .9 | 3,404 | 1%. | | | |
| 16 | Unlines | F. | 1,124 | \$ | 1,291 | 8 | 1,485 | \$ | 3,900 | 15 | | | |
| 17 | Auto Expension | E. | 1,795 | 3 | 2,063 | 8 | 2,373 | 4 | 6,230 | 25 | | | |
| 8 | Other | \$ | 421 | Ŧ | 483 | \$ | 555 | \$ | 1,459 | 25 | | | |
| 19 | Total Expenses | F. | 45,328 | \$ | 52,123 | \$ | 59,941 | \$ | 157,392 | | | | |
| 21 | Net Profit | 5 | 113,849 | \$ | 116,733 | 5 | 110,893 | ę | 341,475 | | | | |

Figure 5-8: A selected arrow

Annotate with Text Boxes

- 1. Click the Text Box tool on the Drawing toolbar. The mouse pointer appears as an upside down cross.
- **2.** Click and drag diagonally to draw the box the approximate size you want it. You can resize or move it later if necessary. When you release the mouse button you see a text box like the one in Figure 5-9.
- 3. Type the desired text.
- 4. Click outside of the text box to deselect it.



Depending on the text box size and location, the text box may cover up worksheet cells. See the "Manipulate Graphics" section to see how to move it out of the way.

5. Right-click the text box and choose Format Text Box. You see the Format Text box, as shown in Figure 5-10.



Optionally, if you want to format only a portion of the text, select the text before displaying the Format Text dialog box.

6. Select and modify any desired options in the Format Text box. Chapter 4 shows you how to use the Format Text dialog box.



To make the text box size fit automatically around the text, select the Alignment tab in the Format Text dialog box and check the Automatic Size options.

7. Click OK.



To delete the text box, click it and press the Delete key on the keyboard.

| And | | 2.11 | E B B | ā. | 1.55 | 14 | 33. | 1 | or Ar | a | | | |
|----------|----------------|------|-------------------------|-----|-----------|-----|---------|-----|---------|------|---------|---|-----|
| 1 | A | | В | | C | | D | | E | F | G | н | 1.7 |
| 1 | | | ABC | c | orpora | tic | m | | | | | | |
| 2 | | | Incor | ne | State | me | nt | | | | | | |
| 3 | | - | CONCERCION OF THE OWNER | 979 | (Andrews | 0.1 | | | | | | | |
| 4 | | 1.1 | Tenary | | February | - | March | 1 | Totals | Fata | | | |
| 5 | Revenues | 1 | | 11 | | 2.1 | | | | | | | |
| 6 | East | 5 | 42,975 | \$ | 49,421 | 5 | 58,834 | \$ | 149,231 | 345 | | | |
| 7 | West | \$ | 37,485 | 1 | 43,108 | 5 | 49,574 | \$ | 130,187 | 21/5 | | | |
| 8 | North | \$ | 28,994 | \$ | 33,343 | \$ | 38,545 | 4 | 100,682 | 205 | | | |
| 9 | South | \$ | 49,723 | 8 | 42,984 | \$ | 26,081 | \$ | 118,787 | 24% | < · · · | | |
| 10 | Total Revenues | - F | 159,177 | | 168,856 | 5 | 170,834 | \$ | 498,867 | | 1- | | |
| 11 | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | |
| 13 | Supplies | 5 | 32,568 | \$ | 37,452 | 5 | 43,070 | 9 | 113,090 | | | 8 | |
| 14 | Wages | ÷. | 8,440 | \$ | 9,705 | 18 | 11,162 | - 5 | 29,308 | 13- | | | |
| 15 | Office Expense | 5 | 158 | \$ | 1,127 | 5 | 1,296 | 1.5 | 3,404 | 172. | | | |
| 16 | Unillias | - 5 | 1,124 | 3 | 1,291 | 8 | 1,485 | \$ | 3,906 | 172 | | | |
| 17 | Auto Expanse | | 1,795 | \$ | 2,063 | 2 | 2,378 | \$ | 6,230 | 25 | | | |
| 18 | Other | \$ | 421 | \$ | 483 | \$ | 565 | 1 | 1,459 | | | | |
| 19 20 | Total Expenses | . 1 | 45,326 | Ŧ | 52,123 | \$ | 59,941 | \$ | 157,392 | | | | |
| 21 | Net Profit | 5 | 113,849 | \$ | 116,733 | 5 | 110,893 | ę | 341,475 | | | | |

Figure 5-9: Annotate worksheet issues with text boxes

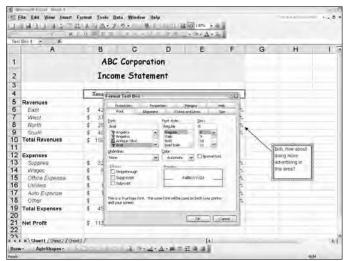


Figure 5-10: Establish options for a text box

Draw AutoShapes

- 1. Click the AutoShapes button on the Drawing toolbar.
- **2.** Select an AutoShape category and then select an AutoShape (see Figure 5-11).
- **3.** Click and drag diagonally to draw the object the size you want it; then release the mouse button.



Select the AutoShape and begin typing to add text to the shape.

To delete the AutoShape, click it and press the Delete key on the keyboard.

See the "Manipulate Graphics" section later in this chapter to resize, rotate, move, or crop the AutoShape.

Shade Your Drawings

- 1. Select the drawn AutoShape, text box, or arrow. Click the Shadow Style button on the Drawing toolbar.
- **2.** Select an option. As shown in Figure 5-12, the object takes on a shadowed appearance.
- **3.** With the shadowed object selected, click the Shadow Style button again and click the Shadow Settings button. This displays the Shadow Settings toolbar.
- **4.** From the Shadow Settings toolbar, click any button to further modify the shadowed object, such as, turn the shadow on or off; increase the shadow direction left, right, up, and down; change the shadow color.
- *5.* Click the Close box on the Shadow Settings toolbar to put it away.

| ± 10 ± (B)./ | | | | | £ | - 41 51 4 | 旧 | 1275 2.4 | 2 | | | |
|----------------------|---|--|---|---|--|--|---|---|--|---|--|---|
| | 12 | | . | \$ 16 1 15 | 14 | 100.001 | i. | 3+A+3 | a . | | | |
| 16 × K | _ | | _ | | _ | | _ | | _ | | | _ |
| A | | 8 | | C | | D | | E | F | G | H | 1 |
| | | ABC | : 0 | orpora | tic | m | | | | | | |
| | | Incor | ne | State | me | nt | | | | | | |
| | - | | 1 | | _ | | _ | | - | | | |
| | - | January | | - aprilary | - | March | - | Tetalo | Patie | | | |
| | 1 | 12 026 | | 10.000 | | 10.044 | | 100 324 | | | | |
| | 12 | | | | | | 4 | | | | | |
| | 1 | | | | 1 | | 12 | | | | | |
| | 12 | | 1 | | 12 | | 12 | | | | | |
| Total Revenues | 1 | 159,177 | ŝ | 168,856 | ÷ | 170,834 | - | 498,867 | 2 | | | |
| | | | | | | | | | | | | |
| Expenses | | | | | | | | | | | | |
| | 4 | | 4 | | 1 | 43,070 | \$ | 113,090 | 79% | | | |
| | 18 | | -8 | | -\$ | 11,162 | 15 | 29.308 | 71- | | | |
| | 12 | | | | | | Ŧ | | | | | |
| Ub 31 Lines | | | | | 0.5 | | - | | | | | |
| AV S Connectors | | | | | . T. | | Ŧ | | | | | |
| OM 82 Basic Shapes | | | -\$ | | 4 | | Æ | | 87. | | | |
| Total E Block Arrows | | . 5.328 | 1× | 52,125 | 1 | 50,941 | 1 | 157.302 | | | | |
| Se Brechart | | + | | | | 140.001 | | | | | | |
| | 15- | 100 | 4 | | | 110/3952 | | 341.4/5 | | | | |
| Callouts | | | AL A | al a | | | | | | | | |
| • AutoShapes• | 5 | 0.11 | 0 | SFRIDA | | A-== | | 10 | | _ | | - 37 |
| | Revenues East West North South Total Revenues Expenses Supprise Wargen Office Scanses Office Data Stages Office Data Stages Stageness Office Data Stages Stageness Office Data Stages Stageness Office Data Stages Stageness Stageness Office Data Stages Stageness Stageness Office Data Stages Stageness Stagene | Revenues Exat s Wat S Suth S Total Revenues Expenses Suppoint S Suppoint S S Suppoint S S Suppoint S S Suppoint S S Suppoint S S Suppoint S S Suppoint S S S S Suppoint S S S S S S S S S S S S S S S S S S S | ABC Incor East 4.2,95 Watt 37,465 Youth 26,904 Stantin 442,975 Youth 26,904 Stantin 443,975 Total Revenues 159,177 Expenses 5400 Office Frances 981 Valuet 1,536 Office Frances 983 Utal State 1,736 Office Frances 983 Utal State 1,736 Office Frances 983 Utal States 5,328 Brenchart 975 State Autors Autors 5,328 Brenchart 900 State Autors Autors 900 | ABC C Income East 42,975 Want 537,415 Youth 28,994 Youth 28,994 Youth 28,994 South 642,975 Youth 638,994 Youth 638,994 Youth 648,994 Wath 632,568 Wath 632,568 Wath 632,588 Wath 632,588 Wath 632,588 Wath 632,588 Wath 532,588 Wath 532,588 Wath 5,325 Wath 5,325 Wath 5,325 Wath 5,328 Wath 5,328 Bath Shape 5,328 Bath Shape 5,328 Wath 5,328 Bath Shape 5,328 | ABC Corpora Income State Text 3 1000000000000000000000000000000000000 | ABC Corporation Income Stateme Encit 4 2.075.8 6 49.478 Water 9 7.476.5 48.101.8 Statil 9 7.476.5 48.101.8 Water 9 7.476.5 48.101.8 Water 9 7.476.5 48.101.8 Statil 9 7.476.5 48.101.2 43.343.8 Morth 9 7.676.5 48.101.2 43.343.8 Total Revenues 159.177.5 168.856.9 5 Supprivation 6 42.558.9 9.776.8 2.006.9 Official Revenues 159.177.5 128.856.9 5 Expenses 9.11.31.12 1.127.8 2.006.2 2.006.2 2.006.2 2.006.2 2.006.2 2.006.2 2.006.2 2.006.2 2.007.2 2.008.2 2.006.2 2.006.2 2.006.2 2.007.2 2.008.2 2.007.2 2.008.2 2.008.2 2.007.2 2.008.2 2.008.2 2.008.2 2.008.2 2.007.2 2.008.2 2.008.2 2.008.2 2.008.2 2.008.2 2.008.2 | ABC Corporation Income Statement Theorem 5 Statement Exect 4 2,975 4 0,421 6 6 334 Weat 6 37,455 4 3,016 4 9,016 8 3,343 Weat 6 37,455 4 3,016 4 9,016 8 3,343 8 58,345 Standn 4 49,222 4 24,044 20,661 10,083 9,077 8 168,952 10,083 Total Revenues 1 199,177 8 168,952 8 17,052 4 43,070 10,083 10,033 10,083 10,083 | ABC Corporation Income Statement Revenues Summer February stards East 4 2,2/75 4 9,421 6 6,834 6 Water 5 37,455 4 9,744 5 42,075 6 6,974 5 Water 5 37,455 4 9,744 5 42,005 5 70,054 6 6,974 5 42,005 5 70,054 6 6,974 5 42,005 5 70,054 6 6,974 5 42,005 5 70,054 6 6,056 5 170,054 6 11,025 6 0,056 5 170,054 6 11,127 1,126 5 1,226 5 2,321 5 1,226 5 2,321 5 2,323 5 5 1,226 5 2,321 5 3,225 5 5 2,321 5 4 4,217 5 4, | ABC Corporation Income Statement Tencime Statement Revenues Summ revenues Errat 4 2,975 5 40,421 5 66,844 6 169,221 Weart 5 42,975 8 40,421 5 66,844 6 169,221 Weart 5 42,975 8 40,421 5 66,844 6 169,221 Weart 5 74,645 43,104 8 40,844 8 109,821 Weart 6 32,958 9 37,452 6 43,070 6 11,182 93,000 Common 6 32,958 9 37,452 6 43,070 6 11,182 93,000 Office 5 199,177 9 108,856 9 170,854 4 39,000 11,127 9 3,000 Office 5 2,050 9 31 1,127 5 1,200 8 ,400 Office 5 2,062 9 31 1,127 5 1,200 8 ,400 Office 5 2,062 2 0,313 1,405 8 ,490 Office 6 32,958 9 27,122 6 ,504 7 479 Office | ABC Corporation Income Statement Income Statement Summery Permane Summers Enert # 42,075 \$ 40,421 \$ 66,834 \$ 160,231 Permane Event # 37,415 \$ 43,410 \$ 40,674 \$ 150,107 Junce Weath # 37,415 \$ 43,410 \$ 40,674 \$ 150,107 Junce Month # 48,722 \$ 42,976 \$ 40,421 \$ 56,834 \$ 100,862 \$ 246 South # 45,722 \$ 42,976 \$ 41,977 \$ 100,863 \$ 246 Total Revenues \$ 159,177 \$ 168,856 \$ 170,68 \$ 111,900 \$ 776, \$ 243,000 \$ 776, \$ 113,000 \$ 10,000 \$ 113,000 \$ 10,000 \$ | ABC Corporation Income Statement Revenues Event 4 2,976 8 49,421 6 66,844 6 193,231 996, 344,333 Weart 5 42,976 8 49,421 5 66,844 6 193,231 996, 344,333 Weart 6 42,976 8 49,421 5 66,844 6 193,231 946, 344,333 Yearth 6 32,968 6 37,452 6 43,070 6 110,672 245, 346,014 Total Revenues E 159,177 5 198,859 8 170,854 948,900 775, 444,04 9,765 113,030 775, 444,04 9,765 113,030 775, 432,001 113,030 775, | ABC Corporation Income Statement Termine Statement Termine Statement Termine Statement Event \$ 42,075 \$ 40,421 \$ 60,834 \$ 140,231 \$ 90, Weart \$ 37,416 \$ 43,104 \$ 40,574 \$ 130,107 \$ 140, Weart \$ 37,416 \$ 43,104 \$ 40,574 \$ 100,862 \$ 245 Stanth \$ 40,272 \$ 42,004 \$ 30,805 \$ 100,862 \$ 245 Stanth \$ 40,272 \$ 42,004 \$ 30,005 \$ 115,090 \$ 775, Weart \$ 43,298 \$ 37,452 \$ 43,070 \$ 113,090 \$ 775, Weart \$ 43,444 \$ 3,716 \$ 116,757 \$ 32,308 \$ 10 Colspan="2">Tetal Revenues \$ 159,177 \$ 108,856 \$ 110,127 \$ 32,300 \$ 775, Weart \$ 43,444 \$ 3,716 \$ 113,127 \$ 32,300 \$ 775, Weart \$ 443 \$ 3,454 \$ 439,000 \$ 775, Weart \$ 43,444 \$ 3,716 \$ 113,090 \$ 775, Weart \$ 43,444 \$ 3,717 \$ 113,289 \$ 3,404 \$ 1, 11,728 \$ 1,272 \$ 1,289 \$ 1,475 \$ 1 |

Figure 5-11: Select from over 130 different shapes

| A. 8.4 | -1 -10 Supe 6 - 16 | 1.11 | 2.2.2. | - | 1000 | 1.7 | 12.20 | | 3·4- | | | | |
|----------|-------------------------|------|---------|----|----------|-----|---------|------|--------------|---------|---------|---|-----|
| - | A | 1 | 8 | | C | | D | | E | F | G | H | 1 3 |
| 1 | | | ABC | C | orpora | tic | m | | | A | a | | |
| 2 | | | Incor | ne | State | me | nt | | 6 | 7- | C°- | - | |
| 3 | | | | | | | | | | 100 | An a - | | |
| 4 | 1.1.1 | T | January | 21 | February | | March | | Totalo | Fatur | | | |
| 5 | Revenues | | | - | | | | | | | | | |
| 6 | East | | 42,975 | \$ | 49,421 | \$ | 56,834 | - | 149,231 | 70% | | | |
| 7 | West | - 5 | 37,485 | \$ | 43,108 | \$ | 49,574 | 5 | 130,187 | 26% | | | |
| 8 | Narth | | 28,994 | -8 | \$3,343 | - | 38,345 | \$ | 106.682 | 20% | | | |
| 9 | South | - 5 | 49,722 | 1 | 42,984 | + | 26,081 | \$ | 118,787 | 24% | | | |
| 10 | Total Revenues | | 159,177 | 5 | 168,856 | - | 170,834 | \$ | 498,867 | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | |
| 13 | Supplies | 4 | 32,568 | 4 | 27,452 | -\$ | 43.070 | 4 | 113,090 | 79% | | | |
| 14 | Wagas | | 8,440 | \$ | 9,706 | 18 | 11,182 | 5 | 29.306 | 71. | | | |
| 15 | Office Expense | 5 | 981 | 15 | 1,127 | \$ | 1,290 | - 8; | E 404 | - 16 | | | |
| 16 | Ubilities | - 5 | 1,124 | 5 | 1,291 | \$ | 1,485 | 18 | Hel Stretter | 15 | | | |
| 17 | Auto Expense. | \$ | 1,795 | \$ | 2,063 | -\$ | 0,373 | - | 40.40 | 22. | | | |
| 18 | Other | 1.2 | 421 | \$ | 483 | -\$ | 655 | . \$ | - | 0%. | | | |
| 19 20 | Total Expenses | \$ | 45,328 | \$ | 52,125 | \$ | 59,941 | ŧ | | a l | | | |
| 21 | Net Profit | 5 | 113.849 | 14 | 116,733 | 14 | 110.893 | | BBFF | Jene to | a and | | |
| 22 | Hat From | - 14 | 112.040 | 1 | 110//30 | | 110,095 | 1 | | Jabs 9 | See D.1 | | |
| 23 | WAtherts / chests / Str | | | | | | | | | | | | |

Figure 5-12: Adding shadow effects to objects

Make Objects 3-Dimensional

- 1. Select the drawn AutoShape or text box.
- 2. Click the 3-D Style button on the Drawing toolbar.
- **3.** Select an option. The object takes on depth giving the impression of a 3-dimensional object.
- **4.** With the object still selected, click the 3-D Style button again and click the 3-D Settings button. The 3-D Settings toolbar displays.
- **5.** From the 3-D Settings toolbar, click any button to further modify the object (see Figure 5-13):
 - Tilt: Controls the object rotation up, down, left, or right
 - **Depth:** Increases or decreases the depth of the 3-D object
 - Direction: Changes the object perspective
 - Lighting: Displays the 3-D object as though a light were shining on it
 - **Surface:** Gives the object surface the appearance of solid matte to wire frame, plastic, or metal
 - Color: Select the object color

Insert Saved Images

- 1. Choose Insert=>Picture=>From File.
- **2.** From the Insert Picture dialog box shown in Figure 5-14, select the picture you want to place in the worksheet.
- Click the Insert button. Excel places the picture on the worksheet.

| | | 1.0 | 2.2.2 | - | 1000 | 1.7 | 110.012 | 1 | >· 4- | 8 | | | | | | |
|----------|-------------------|-----|---------|----|----------|-----|---------|----|----------|---------|-------|-------|---|---|---|----|
| AURSS | A | 1 | 8 | | C | - | D | | E | F | 1.1.1 | G | 1 | + | 1 | 3 |
| + | | | ABC | c | orpora | tic | m | | - | | 0 | | 1 | - | | |
| - | | | | | | | | | 0 | | 887 | 0 | | | | |
| 2 | | | Incon | ne | State | me | ent | | | | | | | | | |
| 3 | | | | | | | | | | | • | 10.77 | | | | |
| 4 | | T | Tanuary | | February | | March | | Totalo | Fat | | | | | | |
| 5 | Revenues | | | - | | | | | | | | | | | | |
| 6 | East | | 42,975 | \$ | 69,421 | \$ | 56,834 | - | 149,231 | | 10701 | | | | | |
| 7 | West | - 5 | 37,485 | \$ | 43,108 | \$ | 49,574 | \$ | 130,187 | | 2612 | | | | | |
| 8 | North | | 28,994 | -8 | \$3,343 | - | 38,345 | \$ | 100.682 | | 2.6% | | | | | |
| 9 | South | - 1 | 49,722 | 1 | 42,984 | + | 26,081 | \$ | 118,787 | | 24% | | | | | |
| 10 | Total Revenues | 1.5 | 159,177 | 5 | 168,856 | - | 170,834 | \$ | 498,867 | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | | | | | |
| 13 | Supplies | 4 | 32,568 | 4 | 27,452 | 1 | 43,070 | \$ | 113,090 | | 77% | | | | | |
| 14 | Wagan | 1 | 8,440 | \$ | 9,706 | -\$ | 11,182 | 5 | 29.306 | | 71. | | | | | |
| 15 | Office Expense | 4 | 981 | -8 | 1,127 | -\$ | 1,290 | 1 | 3,404 | | 1% | | | | | |
| 16 | Libilities | - 5 | 1,124 | -5 | 1,291 | \$ | 1,485 | \$ | 140.94 | 1 | 1% | | | | | |
| 17 | Auto Expense | \$ | 1,795 | \$ | 2,063 | -\$ | 2,373 | ÷ | in lin d | 前司 | 2% | | | | | |
| 18 | Other | - 2 | 421 | \$ | 483 | 4 | 665 | ÷. | B 100 | | 0%. | | | | | |
| 19 | Total Expenses | | 45,328 | \$ | 52,125 | \$ | 59,941 | ÷ | 10.33 | 0.9.462 | | | | | | |
| 20 | | | | 1. | | | | | 10.001 | 1.2 | | | | | | |
| 21 22 | Net Profit | \$ | 112.849 | 15 | 116,733 | | 110,893 | τ. | 1991 | 37 | | | | | | |
| 22 | A THE PARTY AND A | | | | | | | | 0.00 | 1 11 | (| | | | | -1 |

Figure 5-13: Adding depth to objects



Figure 5-14: Use this feature to insert your company logo onto a worksheet

Add Clip Art

- 1. Choose Insert Picture ClipArt. The Clip Art task pane appears on the right, as shown in Figure 5-15.
- **2.** In the Search For box, type a brief description of the type of image you want, such as food, buildings, or people.
- **3.** Choose where you want Excel to search for the clip art from the Search In drop-down list:
 - My Collections: Includes searching in your private folders such as Favorites and My Documents.
 - Office Collections: Includes clip art installed with the Microsoft Office application. These choices are organized by category.
 - Web Collections: Includes clip art from the Microsoft Office Web site.
- **4.** Choose the type of image you want from the Results Should Be drop-down list. Excel can locate clip art, photographs, movies, or sound files.



Click the plus sign next to any image type to further define the search options.

- **5.** Click the Go button. Excel displays a number of images representing the art you specified, such as the images in Figure 5-16.
- *6.* Select the desired image. Excel places the image onto your worksheet.



See "Manipulating Graphics" later in this chapter to resize, rotate, move, or crop clip art or other images.

| Anal | - 10 - 11 J | ų. | 2.2.4 | 4 | 1. 20. 1. 2 | 1.9 | SE SE | 1 | 0+A+3 | iê. | | |
|----------------|-----------------------|------|---------|-----|-------------|-----|---------|----|---------|-------|--|---|
| | A | | в | | C | | D | | E | F | Old-Art | |
| 1 | | 1 | ABC | C | orpora | tic | m | | - | | Stadilar. | |
| 2 | | | Tocor | | State | ma | mt | | | | inatives | 6 |
| 3 | - | 1 | THEOR | ile | Diale | ine | | | | | Search rc. W collectores | |
| 4 | | 1 | Tanary | - | February | - | March | - | Totals | Fale | Rend's should be | |
| 5 | Revenues | - | | - | | - | Partil | - | 10.042 | Latin | Selected needs / de Aypen | _ |
| 6 | Earl | 5 | 42.975 | - | 49.421 | s | 58.834 | 1 | 149.231 | 345 | I Minimita types I Op Act | |
| 7 | Wayt | 5 | 37.485 | ŝ | 43,108 | 8 | 49.574 | 12 | 130,167 | 21/5 | + 🖾 Rhotographia | |
| 8 | North | 5 | 28,994 | \$ | 33,343 | s | 38,345 | 18 | 100,682 | 101 | + D Monto | |
| 9 | South | Ŧ | 49.723 | 8 | 42,984 | \$ | 26,081 | 1 | 118,787 | 24% | a la solation | |
| 10 | Total Revenues | \$ | 159 177 | 4 | 168,856 | \$ | 170,834 | \$ | 498,867 | | | |
| 11 | | | | | | | | | | | | |
| 12 | Expenses | | | | | | | | | | | |
| 13 | Supplies | 5 | 32,568 | \$ | 37,452 | \$ | 43,070 | 4 | 113,090 | 777. | - | _ |
| 14 | Wages | Ę. | 8,640 | ş | 9,705 | 1 | 11.162 | 5 | 29,306 | 5 | | |
| 15 | Office Expense | 5 | 981 | ş | 1.127 | \$ | 1,296 | 5 | 3,404 | 12 | | |
| 16 | Unlines | - 8 | 1,124 | \$ | 1,291 | 8 | 1,485 | 4 | 3,900 | 45 | | |
| 17 | Auto Expense | E. | 1,795 | \$ | 2,063 | 18 | 2,373 | 18 | 6,230 | 25 | | |
| 18 | Other | Ŧ | 421 | ŧ | 483 | 8 | 555 | ş | 1,459 | 18 | | |
| 19 | Total Expenses | - E. | 45,328 | \$ | 52,123 | 8 | 59,941 | \$ | 157,392 | | | |
| 20 21 22 | Net Profit | 5 | 113,649 | 4 | 116,733 | 5 | 110,893 | ę | 341,476 | | B) Oranner des. | |
| 33 | #\sheet1/sheet2/sheet | | | | | ter | | | | 1.141 | A an Transfer Facting plan | |

Figure 5-15: Searching for clip art

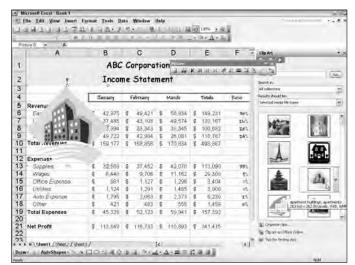


Figure 5-16: Placing clip art onto your worksheet

Manipulate Graphics

- **1.** Select the object you want to modify. Small white circles, called *handles*, appear around the perimeter of a selected object. Arrows typically have two selection handles while other objects, including images, have eight handles. Objects other than arrows also have one small green circle called a rotation handle. Figure 5-17 shows a selected object.
- 2. Perform any of the following actions:
 - Delete: Press the Delete key on the keyboard.
 - Move: Position the mouse pointer over the object, but not on the handles. Click and drag the object to the desired location.
 - **Resize:** To resize an object, position the mouse pointer over one of the white selection circles and drag the circle until the object is the desired size.
 - **Rotate Shape:** Drag the green rotation handle until the object rotates to the desired angle. This does not apply to arrows.
 - **Rotate Arrow:** Drag either of the white circles in the direction you want to rotate.
 - **Crop:** From the Picture toolbar (see Figure 5-18), select the Crop tool and drag a corner, top, bottom, or side until the unwanted picture portion is removed.



Click the Reset Picture button on the Picture toolbar to restore a picture to its original setting.

3. Click anywhere outside of the graphic to deselect it.

| | ionesifEscul Book 1 ile Edit View Insert | Format | Tools D | ala Let | Contraction of the | Helt | | 133 | lum é al | | | 200 | (Art Tra | • - 0 |
|----------|---|-------------|-------------|------------|--|------|---------|------|---------------|---------|----------|--|----------|-------|
| Carlos a | -1 -2.00 | - | 2.1.1 | - | 1 | | | | a. 4. | | | | | |
| - pit | 6 - 6 - A | 1 | в | - | C | - | D | - | E | F | G | н | 1 2 | 1 |
| - | 0 | - | | | | | | - | E. | | | | | |
| 1 | | | ABC | C | orpora | tic | n | 21.4 | at at at | 11 - 11 | 3. 2. 7. | | | |
| - | | | + | | · · · · | | | - | AL 10. 11. 4. | | 2.6 | | | |
| 2 | | | Incor | ne | State | me | ent | | | | 1 | | - 1 | |
| 3 | | - | | | | _ | | _ | 2.1 | 846.5 | E WEET | 61.aitit | -4 | |
| 4 | 1 | 1.0 | Tanuary | - 1 | February | | March | | Tetals | 1.1 | RABERT | 180.0 | 81. | |
| 5 | Revenues | 1 | | | | | | | | 100.00 | 1.5 3 | M-100 | 88 | |
| 6 | Equit | 5 | 42.975 | \$ | 49,421 | 1 | 56,834 | Ŧ | 149.22 | 10.00 | 2001 | 100 | 88 | |
| 7 | West | - 5 | 37,485 | \$ | 43,108 | 4 | 49,574 | \$ | 130.11 | A | 4 | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | |
| 8 | North | - 5 | 28,994 | \$ | 33,343 | \$ | 38,345 | \$ | 100.65 | - | | | 28. | |
| 9 | South | \$ | 49,722 | \$ | 42,984 | \$ | 26,081 | \$ | 118,78 | | | | 12 | |
| 10 | Total Revenues | \$ | 159,477 | \$ | 168,856 | \$ | 170,834 | \$ | 495,0 | - | | | | |
| 11 | anne the | | | | | | | | 1.0 | - N.S. | 100 | | | |
| 12 | Expenses | | | | | | | | | - | 1 | | | |
| 13 | Supplies | \$ | 32,568 | \$ | 37.452 | 18 | 43,070 | 14 | 113,000 | 33 L | | | | |
| 14 | Wages | \$ | 8,440 | \$ | 9,706 | - 5 | 11,162 | 5 | 29,308 | 15 | | | | |
| 15 | Office Expense | \$ | 981 | ş | 1,127 | \$ | 1,295 | \$ | 3,404 | 12. | | | | |
| 16 | Libilities | \$ | 1,124 | \$ | 1,291 | 1 | 1,485 | \$ | 3,900 | 12 | | | | |
| 17 | Auto Expense | 4 | 1,795 | 1 | 1,063 | 18 | 2,373 | 18 | 6,230 | 25 | | | | |
| 18 | Other | \$ | 421 | \$ | 483 | \$ | 555 | 1 | 1,459 | 4% | | | | |
| 19 20 | Total Expenses | \$ | 15,328 | 8 | 52,123 | \$ | 59,941 | 5 | 157,392 | | | | | |
| 21 22 | Net Profit | \$ | 113,849 | \$ | 116,733 | \$ | 110,893 | \$ | 341,475 | | | | | |
| ??. | W\sheet1/spect2/spe | HD / | | | | | | | 141 | _ | _ | _ | - | 13 |
| Dear | · AutoShapes · 😒 | 100 | 12140 | 121 | 315.4 | 1. | A·BE | = | 4.43 | | | | | |
| in h | The second second | 12/11/12/20 | Constant Co | | 1.1.5 (2.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1 | | | 1 | | | | | 14.84 | - |

Figure 5-17: A selected object with eight selection handles and a rotation handle

| 1 | ile Edit View Insert | Contraction (Sec. Cont | 0.00 | | Contraction of the | Helt | | 1112 | 1270 | | | The American International Social | |
|--------|--|------------------------|---------|-----|--------------------|------|---------|------|-----------|--------------------|-----------|--|------|
| 2016.2 | -1 -2 m | | 2.2.2 | - | 1.0.0 | | | | a . 4 - 1 | | | | |
| · Pht | ture 9 👘 👘 | - | | _ | - | - | | - | - | - | - | | |
| - | A | - | В | | C | | D | - | E | F | G | н | 1 |
| 1 | | | ABC | C | orpora | tic | n | 11 | भ ज व 🕂 | | 101 | | |
| 2 | | | Incor | ne | State | me | ent | | | - | | | |
| 3 | | | | | | | | | | TRAIN. INC | 1 100 100 | INCOME. | |
| 4 | | 1.1 | Tanuary | . 1 | February | | March | | Totals | 1 | M BE | Section 1 | |
| 5 | Revenues | 1 | | | | | | | | | 150.0 | Contraction of the | |
| 6 | Equit | 5 | 42.975 | \$ | 49,421 | - | 56,834 | Ŧ | 148,231 | 1.04.0 | 100.0 | ALC: NO | |
| 7 | West | \$ | 37,485 | \$ | 43,108 | \$ | 49,574 | \$ | 130,167 | 1 | - | | |
| 8 | North | - 8 | 28,994 | -8 | 33,345 | \$ | 38,345 | + | 100,682 | and a | | 1000 | |
| 9 | South | \$ | 49,722 | \$ | 42,984 | \$ | 26,081 | 5 | 118,787 | | | and the second | |
| 10 | Total Revenues | \$ | 159,177 | \$ | 168,856 | \$ | 170,834 | \$ | 495,867 | | | | |
| 11 | | | | | | | | | | Contraction of the | Cite: | the state of the local division of the local | |
| 12 | Expenses | | | | | | | | | - | Sec | | |
| 3 | Supplies | - 5 | 32,568 | \$ | 37.452 | 18 | 43,070 | 18 | 113.090 | 33% | | | |
| 4 | Wages | 5 | 8,440 | \$ | 9,706 | - 8 | 11,162 | 15 | 29,308 | 15 | | | |
| 15 | Office Expense | \$ | 981 | ş | 1,127 | \$ | 1,295 | \$ | 3,404 | 42. | | | |
| 16 | Ukililiwas | \$ | 1,124 | \$ | 1,291 | 18 | 1,485 | \$ | 3,900 | 12 | | | |
| 17 | Auto Expense | 8 | 1,795 | 4 | 1,063 | | 2,373 | ÷ | 6,230 | 2% | | | |
| 18 | Other | \$ | 421 | \$ | 483 | \$ | 555 | ş | 1,459 | 8% | | | |
| 19 | Total Expenses | | 45,328 | 8 | 52,123 | -\$ | 59,941 | \$ | 157,392 | | | | |
| 20 | in the second se | - | | | | 1 | | 1 | | | | | |
| 21 | Net Profit | - 12 | 113,849 | 1 | 116,733 | 18 | 110,893 | - 5 | 341,475 | | | | |
| 2 | HASheet3 (Sheet2 / She | | | | | | | | 14/ | | | | - 13 |

Figure 5-18: Removing undesired areas of a picture

Working with Workbooks

A llow me to begin by clearing up a couple of terms. There are *worksheets* (sometimes called *spreadsheets*), which are a single collection of cells with up to 65,536 rows down and 256 columns across. Therefore, each worksheet can contain up to 16,777,216 cells of data.

Secondly, there are *workbooks*, which are a collection of worksheets. By default, each time you create a new Excel workbook, it contains three worksheets. Each workbook however, can have up to 256 worksheets. The resulting possible number of cells in a single workbook is too huge (over 4 billion!) to even think about, but the fact remains you *could* create a single huge workbook. Realistically though, you'll probably have a number of different workbooks, each with a number of worksheets.

This chapter is primarily about working with multiple sheets. You discover how to insert, delete, move, and copy worksheets, move among the sheets, rename the tabs that reference them, and create formulas that reference other worksheets or workbooks.

It's also about protection. Throughout this chapter, you find out about security protection in the form of hiding rows, columns, single worksheets, or even entire workbooks. Discover how to lock a sheet so you or others don't accidentally overwrite critical formulas or other data. I even show you how to protect a workbook with a password so others cannot see it or modify it.

Finally, I show you how to create hyperlinks to Web sites, other cells or workbooks, or create an instant e-mail.

Chapter

Get ready to. . .

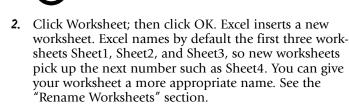
| Insert Additional Worksheets | 54 |
|------------------------------------|----|
| Delete Worksheets | 54 |
| | 55 |
| Rename Worksheets | 55 |
| | 56 |
| Hide and Unhide Worksheets | 56 |
| Hide Rows or Columns | 57 |
| Redisplay Rows or Columns | 57 |
| → Unlock Cells | 58 |
| Relock Cells | 58 |
| Protect Worksheets | 59 |
| | 60 |
| | |
| Worksheet | 60 |
| ➡ Include a Reference in a Formula | 61 |
| Cross-Reference Other Workbooks | 62 |
| ··→ Insert a Hyperlink | 63 |

Insert Additional Worksheets

1. Right-click a worksheet tab and choose Insert. The Insert dialog box appears.



Optionally, choose Insert=>Worksheet.



3. Click a tab at the bottom of the worksheet. That worksheet becomes the current sheet (see Figure 6-1 where Sheet4 is the current worksheet).



Optionally, press Ctrl+PageUp or Ctrl+PageDown to move between worksheets.

Delete Worksheets

1. Choose Edit Delete Sheet. A warning message appears as shown in Figure 6-2.



A worksheet with no data on it doesn't display the warning message.

2. Click the Delete button.



You may want to save your workbook before you delete a worksheet. The Undo feature does not work with the Delete Sheet function.

| | | | n 10 | -1.8 | | | | | | | | | | | | • 44 • 74 | | | | | | | | |
|--|----|-----|------|---------|---|---|-----|-----|---|---|---|---|---|----|----|--------------|------|---|---|---|---|---|---|------|
| | At | | | ۶. C | 1 | D | 1 1 | E 1 | F | 1 | G | 1 | н | 12 | 1. | 3 | 1.14 | 8 | L | - | М | N | 0 | - |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 4 4 6 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6/ | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 8 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| ů. | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | - | | | | | | | | | | | | | | | | | | | | | | |
| 81 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 5 6 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 77 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 11 12 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 10 11 12 13 14 15 16 11 12 13 14 15 16 11 12 13 14 15 16 11 12 13 14 15 16 11 12 13 14 15 16 11 12 13 14 15 16 11 12 11 11 | | 100 | | | | | | | | | | | | | | | | | | | | | | |
| ũ | | - | | 11/19 | | - | | | | | | | | | 14 | | | | | | | | | - 20 |

Figure 6-1: Inserting a new worksheet

| Microsoft | E ASSA | | | - | |
|-----------|----------------------|-------------------------|---------------------|------------------------------|----------|
| 1 | Data may exist in th | e sheet(s) selected for | deletion. To perman | ently delete the data, press | Delete . |
| - | | | | | |

Figure 6-2: Delete an unwanted worksheet

Copy Worksheets

- 1. Right-click the tab on the worksheet you want to duplicate. Choose Move or Copy from the menu. The Move or Copy dialog box appears.
- 2. Check the Create a Copy box. (See Figure 6-3.)
- **3.** Select where, in the order of the worksheets, you want the duplicate sheet placed.
- **4.** Click OK. Excel adds another worksheet exactly like the current one and names it with a (2) next to it.



Select a different open workbook from the To Book drop-down list in which to place the selected worksheet.

To quickly move sheets within the current workbook, you can drag the selected sheet tabs along the row of sheet tabs. To copy the sheets, hold Ctrl, and then drag the sheet tabs, releasing the mouse button before you release Ctrl.

Rename Worksheets

- 1. Click anywhere in the worksheet you want to rename.
- 2. Choose Format^L>Sheet^L>Rename. The worksheet tab becomes highlighted.
- **3.** Type a unique name for the worksheet, as shown in Figure 6-4. Two worksheets in a single workbook cannot have the same name.



Worksheet names can contain spaces and many special characters such as a dash or number sign, but they cannot contain the slash (/), backslash () or the asterisk (*).

4. Press Enter to accept the change.

| Move selected sheets <u>T</u> o book: | |
|--|-----|
| Widget Special Orders.xls | ~ |
| Before sheet: | |
| 2002 2003 2004 2005 Summary (move to end) | |
| Create a copy | cel |

Figure 6-3: Duplicating a worksheet

| <u>.</u> | And the second second second | State of the second of | 1 A -4 0 | | 11144HE | 4 | | | |
|------------|------------------------------|------------------------|---|------------------------------|---------|--|---|---|------|
| 4ų | | SH S B | / 1/ 10 10 | N.S. L | | 4 | | | |
| - | | A B | - | Ċ. | D | E | E | G | . 11 |
| 1 | 2006 | s | - TO | TAL PURCHASES | | he | | | |
| 2 | | | | | | | | | |
| 3 | ORDER | | | | | | | | |
| 4 | DATE | ORDE | R# | ITEM | COST | S&H | | | |
| 5 | | - | | | | 1. | | | |
| 5 6 7 | | | | | | | | | |
| | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| tt [| | | | | | | | | |
| 17 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | - | | |
| 15 | | | | | | | | | |
| 17 | | | | | | | - | | |
| 18 | | | | | | | - | | |
| 19 | | | | | | | - | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 21 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 5 | | | | | | | | | |
| 24 5 26 27 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| | | | | 000 / 2005 / 2004 / 200 / 50 | | | | - | |
| Dean | Auto | Shapes - 00 h | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | 1201010-27 | 11日日日日日 | | | | |



Change Worksheet Tab Colors

- **1.** To assist in organizing multiple worksheets, click anywhere in the worksheet you want to recolor the tab.
- **2.** Choose Format Sheet Tab Color. The Format Tab Color dialog box, shown in Figure 6-5, appears.
- 3. Select a color.
- 4. Click OK.



When a worksheet with a colored tab is the current worksheet, Excel does not display the tab color in full. It displays only a colored line under the tab name. The tab becomes full color when it is not the active worksheet.

Hide and Unhide Worksheets

1. Click anywhere in the worksheet you want to hide (hold Ctrl for multiple worksheets).



Optionally, to hide all but one worksheet in a workbook, right-click a sheet tab and choose Select All Sheets. Then press Ctrl and click to deselect the sheet you do not want to hide. A workbook must contain at least one visible worksheet.

- 2. Choose Formatr⇒Sheetr⇒Hide. Excel hides the worksheet from view. All formula references to a hidden worksheet are still valid even when a worksheet is hidden.
- **3.** To unhide the worksheet, choose Format⇔Sheet⇔ Unhide. The Unhide dialog box, shown in Figure 6-6, appears, listing all the currently hidden worksheets in the active workbook.
- 4. Select the worksheet you want to unhide.
- 5. Click OK.

56

| ab Color | | | | | |
|----------|------|------|------------|------|--|
| | No C | olor | | | |
| | | | | | |
| | | | | | |
| | | | = | | |
| | | | | = | |
| | | Ц | - | - | |
| | | | | | |
| | | | | | |
| ОК | | C | <i>C</i> = | ince | |

Figure 6-5: The Format Tab Color dialog box



Figure 6-6: Select a worksheet to unhide

Hide Rows or Columns

1. Select the column or row headings you want to hide.



Press Ctrl to select multiple contiguous or noncontiguous rows or columns.

2. Choose Format⇔Column⇔Hide to hide columns or Format⇔Row⇔Hide to hide rows. Notice in Figure 6-7 how column D seems to have disappeared.



All formula references in or referring to hidden columns or rows are still valid even when hidden.

Excel gives hidden rows a row height of 0 and hidden columns a column width of 0.

You cannot hide selected cells. It must be an entire row or column.

Redisplay Rows or Columns

1. Select the columns before and after the hidden column, or the rows above and below the hidden row. In Figure 6-8, because column D is hidden, I selected columns C and E.



To unhide Row 1 or Column A, choose Editter Go To. In the Reference box, type A1, and then click OK. Then proceed to Step 2.

To redisplay all hidden rows at the same time, click the small gray square above row 1 and to the left of column A, and then follow Step 2.

2. Choose Format=>Column=>Unhide to unhide a column or Format=>Row=>Unhide to redisplay hidden rows.

| Ana | | . ii - D | 2 11 8 | 「日本山」・シャンは日 | H | - Or Ara | E . | | | | |
|----------|-----------|----------|----------|----------------------------------|-----|----------|-----|---|---|----|---|
| _ | £1 - | ß. | | | | | - | | | | - |
| | A 2005 | \$ 1 | | TOTAL PURCHASES | - | E | F | 6 | H | -1 | |
| 2 | 2000 | • | 2,103.00 | TOTAL FORGHASES | _ | | | | | | |
| 3 | ORDER | | | | | | | | | | |
| 4 | DATE | ORD | ER# | ITEM | | S&H | | | | | |
| 5 | 01/19/05 | 8620 | 820 | PCW2005 MU B1G1 | 5 | 19.95 | | | | | |
| ħ | 01/19/05 | 3620 | 820 | FCW2005 MU B1G1 | 5 | 19.95 | | | | | |
| 7 | 06/16/05 | 9079 | 360 | PPA Cons 2006 | \$ | 14.95 | | | | | |
| D. | 07/06/05 | 9139 | 007 | PCW2006 MUUG | - 5 | 14.95 | | | | | |
| 9 | 09/09/05 | 9324 | 158 | PCW SU UP | 5 | 14 95 | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 19 20 | | | | | | | | | | | |
| 钽 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 21 | | | | | | | | | | | |
| 22 | 100 | | | | | | | | | | |
| 45 | | | | | | | | | | | |
| 22.25 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 27 | - | | | | | | | | | | |
| 28 | | | | 0 / 2002 / 2000 / 2004), 2005 / | | | | | | | |

Figure 6-7: Temporarily hide selected columns or rows

| Amore Subjection Description Description <thdescription< th=""></thdescription<> | And C1 | - 12 - 10 - 5 TOTA | and the second sec | E - 11 (1 1 10) 100 | | | | |
|--|---|-----------------------|--|--|--------------------------------|---|----------------|---|
| 2 Conditional Fermaniting Unblue TEM 5 8 H 4 ORD Ortupers 4 Ortupers 4 TEM 5 8 H 5 01/1005 85/0620 PC/W2005 MU/B161 5 19/95 6 01/1005 85/0620 PC/W2005 MU/B161 5 19/95 7 001/005 9079300 PC/W2005 MU/B161 5 19/95 10 07/0405 01/1005 93/9240 PC/W2005 MU/B161 5 14/95 0 07/0405 93/94158 PC/W2005 MU/U/C 5 14/95 0 0010005 93/94158 PC/W2005 MU/U/C 5 14/95 10 07/0404 PC/W SUL/P 5 14/95 14/95 10 10 10 10/97 14/95 14/95 14/95 10 10 10 10/97 14/97 14/95 14/95 14/95 14/95 14/95 14/95 14/95 14/95 14/95 14/95 14/95 14/95 | - | | 2007.03 | | | - | E | F |
| 3 ORC Statute / Weth TEM 5.8.H 5 01/1005 R520620 PC/VX005 MU B161 E 19.95 6 01/1005 8620820 PC/VX005 MU B161 E 19.95 7 06/1005 9079550 PFA Com; 2005 E 14.95 0 0305007 PC/VX005 MU UC E 14.95 0 9324155 PC/V SUU.P E 14.95 0 9324155 PC/V SUU.P E 14.95 0 030507 PC/VX005 MU UC E 14.95 0 030507 PC/VX005 MU UC E 14.95 0 9324155 PC/V SUU.P E 14.95 0 935 935 935 935 14.95 0 935 | 2 | 200 | | and the second se | TAL PURCHASES | | | |
| S 01/1005 95/06/20 PC/W2005 MU B161 \$ 19.95 01/1005 98/26/20 PC/W2005 MU B161 \$ 19.95 7 06/1005 90/9550 PFA Come 2001 \$ 14.85 0 070605 90/9550 PFA Come 2001 \$ 14.85 0 050607 PC/W3005 MU B161 \$ 19.95 \$ 14.95 0 050607 PC/W3005 MU B162 \$ 14.95 \$ 14.95 0 050607 PC/W3005 MU B162 \$ 14.95 \$ 14.95 0 050607 PC/W3005 MU B162 \$ 14.95 \$ 14.95 0 050607 PC/W3005 MU B162 \$ 14.95 \$ 14.95 0 050607 PC/WSULP \$ 14.95 \$ 14.95 0 050607 | 3 | | Stule | and the second s | - | | 110 | |
| 6 01/1005 9820820 PCK/0205 M/L B1(cl:1) 5 19 25 10 001/005 007/0350 PFK / Com; 2000 8 14 85 10 070/0405 0130007 PC/W3005 M/L U/L C 5 14 95 0 001/0405 98324155 PC/W3005 M/L U/L C 5 14 95 10 11 12 14 14 95 14 95 10 17 14 95 14 95 14 95 10 17 14 95 14 95 14 95 10 17 19 14 95 14 95 11 12 14 95 14 95 14 95 12 13 14 95 14 95 14 95 12 14 95 14 95 14 95 14 95 13 14 95 14 95 14 95 14 95 14 16 14 95 14 95 14 95 12 14 95 14 95 14 95 14 95 14 16 14 95 | 4 | | | UNUER | | | | _ |
| | 7 n 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 105 105 | | 9079360 9139007 | PPA Cons 2006 PCW2006 MULIG | 5 | 64 95 14 95 | |

....

Unlock Cells

1. Select the cells you want to allow users to modify after you apply worksheet protection.



When you apply worksheet protection, Excel assumes cells are locked unless you specify which cells you want unlocked. You need to unlock these cells before you apply worksheet protection.

- 2. Choose Format Cells, which displays the Format Cells dialog box.
- 3. Click the Protection tab, as shown in Figure 6-9.
- **4.** Deselect the Locked option.
- 5. Click OK.

Relock Cells

Unprotect the worksheet if protected. (See the next section, "Protect Worksheets.")



You may be prompted for a password to unprotect the worksheet.

- 2. Select the cells you want to relock.
- 3. Choose Format⇔Cells.
- **4.** Click the Protection tab and select the Locked option (see Figure 6-10).
- 5. Click OK.
- *6.* If needed, apply worksheet protection again.

| Wipi Contraction | - 10 - B | 1 1 | F.L.A. | 5 | \$ 16. 1.5 | 14 | 100.0010 | | 3.4 | 4- | 8 | | | |
|---------------------|------------------------------|-----|---------|-----|------------|-----|----------|----|-------|--------------|---|----------------------|--------------------|------|
| | A | | в | 2 | C | | D | | E | 1 12 | F | G | н | 1 |
| 4 | 1 | | Taniaty | | February | | March | | Total | lø . | Fatur | | | |
| 5 | Revenues | - | | - | | - | | - | | - | | | | |
| 6 | East | 18 | 42,975 | 14 | 49,421 | + | 56,834 | 18 | 149 | 231 | 70% | | | |
| 7 | West | - 2 | 37,485 | 4 | 43,108 | 4 | 49,574 | ÷ | 130 | 167 | 24% | | | |
| 8 | North | \$ | 28,994 | 4 | 33,343 | + | 38,345 | - | TE | Inial Ca | Hh | | | 1,62 |
| 9 | South | 5 | 49,722 | ΞĒ. | 12,984 | 生 | 26,081 | \$ | 15 | anter [| Algenet Fa | t. Book | Hubbern Probection | Tabl |
| 0 | Total Revenues | . 5 | 159,177 | 6 | 168,855 | 1 | 170,834 | \$ | 40 | | | | | |
| 1 | and the second second second | | | | | | | | | Looist | | | | |
| 2 | Expenses | | | | | | | | 112 |] Addien | | | | |
| 3 | Supplies: | 1.6 | 32,568 | 14 | 37,452 | 5 | 43,070 | - | 1 | | | | | |
| 4 | Wapee | + | 8,440 | \$ | 9,706 | -1 | 11,162 | \$ | 31B | octing cells | or hiding formula a protected. To pr | rites no stifed | t unless the | - 11 |
| 5 | Office Expense | 4 | 981 | 5 | 1,127 | \$ | 1,296 | \$ | | rolection/ | hars the facilit new | AL OTHER DESIGNATION | hoose Protect | |
| 6 | Libithes | 5 | 1,124 | 5 | 1,291 | | 1,485 | \$ | | CODE: H PO | menore a spectra | | | |
| 7 | Auto Expension | 1.5 | 1,795 | 5 | 2,063 | 5 | 7 373 | \$ | | | | | | |
| 8 | Other | .5 | 421 | 8 | 483 | -8 | 655 | -8 | | | | | | |
| 9 | Total Expenses | 1.5 | 45,328 | \$ | 52,123 | . 9 | 59,941 | \$ | 1 | | | | | - 11 |
| 0 | | | | | | | | | . 8 | | | | | |
| 1 | Net Profit | 5 | 113,849 | 16 | 116,7% | 18 | 110,893 | 1 | 3 | | | | | |
| 2 | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | - OK Cire | e |
| 4 | | | | | | | | | | | | | | - |
| 5 | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | |

Figure 6-9: Unlocking specified cells

| ormat Cells | | | | 3 |
|--|------------|-------------|------------|------------|
| Number Alignment | Font | Border | Patterns | Protection |
| Locked | | | | |
| Hidden Hidden | | | | |
| Locking cells or hiding fo | rmulas ha: | s no effect | unless the | |
| worksheet is protected. Protection from the Tool Sheet. A password is op | s menu, a | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | ОК | Cancel |

Figure 6-10: Relocking cells to prevent unwanted changes



Protect Worksheets

 Click anywhere on the sheet you want to protect. Choose Tools+>Protection+>Protect Sheet. The Protect Sheet dialog box appears, as shown in Figure 6-11.



A good reason to protect a worksheet is to protect formulas from accidental changes.

- **2.** Verify the Protect Worksheet and Contents of Locked Cells box is checked.
- **3.** Optionally, type a password to allow a user to unprotect the worksheet in the Password to Unprotect Sheet box.



Passwords are case sensitive.

4. From the Allow All Users of the Worksheet To box, select any options a user is allowed to change without unprotecting the worksheet.



Deselecting the Select Locked Cells option doesn't allow an unauthorized user to even click a locked cell.

- 5. Click OK.
- **6.** If you generated a password, a Confirm Password dialog box appears. Retype the password and then click OK again.
- **7.** Try to change a locked cell in a protected worksheet. Excel displays the error message in Figure 6-12.
- 8. To unprotect the worksheet, choose Tools^I> Protection^I> Unprotect Sheet. Excel prompts you to enter the password if you originally supplied one.



Figure 6-11: Protect a single worksheet

| AU | ≥ 40 ÷[]] | | 2.2.2. | - | Links and | 6.0 | 12.21 | | 3.7. | 8 | | | |
|--|---|-------------|--|---------------|---|---------|--|--------------------------|------------------|----------------|---|---|---|
| _ | | IM(B)FD(F) | | _ | - | - | | - | - | F | | - | |
| | A | - | В | - | C | - | D | - | E | | G | H | 1 |
| 4 | Contra and | _ | Taniary | - | February | _ | March | - | Totalo | Fatur | | | |
| 5 | Revenues | - | ter ter | - | 10.100 | | | 1 | 102.012 | | | | |
| 67 | East | - 8 | 42,975 | 4 | 49,421 | - | 56,834 | 18. | 149,231 | 70% | | | |
| | West | - 8 | 37,485 | ş | 43,108 | \$ | 49,574 | ٤. | 130,167 | 26% | | | |
| 8 | North | \$ | 28,994 | 4 | \$3,343 | \$ | 38,345 | \$ | 100,682 | 28% | | | |
| 9 | South | | 49,722 | 1 | 42,984 | 3 | | \$ | 118,787 | 24% | | | |
| 10 | Total Revenues | 1 | 159,177 | 8 | 168,855 | 18 | 170,834 | 8 | 498,887 | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | Expenses | Beren | W Excel | | | - | | - | | | G | | |
| | | | | | | | | | | | | | |
| | Supplies | - malet men | | | | 1 | | | | | | | |
| 14 | Wapat | K | This solit or e | | | | | | adannai an | | | | |
| 14 15 | Wepet Office Expense | I | The set or d | arte | ctell cell in ches | 1, 74:1 | nemiwe proces | ten a | | Stee (www.ett) | | | |
| 16 | Wagett Office Expense Ublithes | K | The set or d | arte | | 1, 74:1 | president process | ten a | | | | | |
| 14 15 16 17 | Wepet Office Expense | | The set or d | arte | ctell cell in ches | 1, 74:1 | termine protection presi for a para | ten a | | | | | |
| 14 15 16 17 18 | Wagett Office Expense Ublithes | K | The set or d | arte | ctell cell in ches | 1, 74:1 | president process | ten a | | | | | |
| 14 15 16 17 18 19 | Wapat Office Expense Ublithes Auto Expense | | The set or d To world's a Pression is | (acto doma | cteit eel ar d'ar na), yna tale bf | L feed | termine protection presi for a para | nord.] | ng the larged ed | Yes (more) | | | |
| 14 15 16 17 18 19 20 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | This call of d To word's a treasection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 | Wapet Office Expense Utilities Auto Expense Other | 1 | The value of the v | s s | chell cell ar chae nul. You sale be 483 | L feed | termine protection predifice at possible Cost 655 | land and] § | ng the lanceded | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 22 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | 118 set or d To word's a treesection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 22 23 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | 118 set or d To word's a treesection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 22 23 24 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | 118 set or d To word's a treesection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 22 23 24 25 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | 118 set or d To word's a treesection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| 14 15 16 17 18 19 20 21 22 23 24 25 26 | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | 118 set or d To word's a treesection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |
| | Wegen Office Expense Ublines Auto Expense Other Total Expenses | 1 | This call of d To word's a treasection is 421 45,328 | s s | chel cel ar d'an nul. Yeu datu be 483 52,125 | s is | 59,941 | ten a red.] \$ | 1,450 157,302 | Yes (more) | | | |

Figure 6-12: You're prevented from making changes

Create File Passwords

- 1. Choose File=>Save As. The Save As dialog box appears.
- **2.** Click the Tools button and then select General Options. The Save Options dialog box appears (see Figure 6-13).
- **3.** Type a password in the Password to Open text box if you want users to enter a password before they can even open and view the workbook.
- **4.** Type a password in the Password to Modify text box if you want users to enter a password before they can modify the workbook. Users must have the workbook open before they're prompted for the password to modify.
- 5. Click OK.
- *6.* Retype the password to open; then click OK.
- 7. Retype the password to modify; then click OK.
- 8. Click the Save button.



Click the Yes button if you're prompted to overwrite the file.

- **9.** Open the password-protected file and the Password dialog box opens, as shown in Figure 6-14.
- *10.* Type the password and click OK. If you opted for a password to modify, Excel prompts you for the modify password.
- *11.* Type the modify password and click OK. The protected file opens.



To remove passwords, repeat Steps 1 through 5, but make the password boxes blank.



Figure 6-13: Protecting a workbook from unwanted viewing

| Password | × |
|-----------------|--------------|
| 'Book 1.xls' is | s protected. |
| Password: | ••••• |
| | OK Cancel |

Figure 6-14: Enter the password

Generate a Reference to Another Worksheet

- 1. Click the cell in which you want to create a reference.
- **2.** To display a value located in a cell on a different work-sheet, but in the same workbook, type the equal sign (=).
- **3.** Click the worksheet tab containing the cell you want to reference and then click the actual cell you want to reference.
- **4.** Press the Enter key. In the current cell, Excel displays the equal sign, the worksheet name, an exclamation point, and the cell reference. (See Figure 6-15.)



To display a value located in another cell on the same worksheet, type the equal sign and then the cell address; for example: **=B45**. If the value in B45 changes, the cell with the reference to B45 changes also.

Include a Reference in a Formula

- **1.** To include in a formula a cell located on a different worksheet but in the same workbook, begin the formula.
- **2.** Click the worksheet containing the cell where you want to position the distant cell reference; then click the actual cell.
- **3.** Finish the remainder of the formula. Figure 6-16 illustrates an example of a formula using a reference to a different worksheet.



Formulas referencing other worksheets or other workbooks can also be compound formulas or used in a function.

| And A | 111270134.30 | - 単正・1111 単同10% ・ゴロ 単連 _・カー」 | | | | |
|-----------------------|--|--|---|---|---|--------|
| 62 . | A ="tet Quarter#E21 | Last with Start? | | | | |
| | A | C | D | E | F | 6 |
| 1 | | NET PROFIT | | | | |
| 2 | January - March | \$ 341,474.67 | | | | |
| 3 | April - June | a car gathy secondaria | | | | - |
| 4 | July - September | | | | | |
| 5 | October - December | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 5 6 7 8 9 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 10 | Quarter / and Quarter / and Quarter / anti-Quarter | Summary / | | | | Tail 1 |
| Draw- Au | deShapes- > > □ ○ 의 4 ○ 비 4 ○ | $\cdot \not \rightarrow \cdot \Rightarrow = \pm \Rightarrow \Rightarrow$ | 8 | | - | |
| | | | | | | |

Figure 6-15: Creating a reference to another worksheet in the same workbook

| Anal . | | - D J D 医普通道 1 % | 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | A+3 | | | |
|--------|----------|--------------------|--|---------------|---|---|----|
| t | A | B | C | D | E | F | 15 |
| 1 | | 12 | NET PROFIT | TAX | - | | |
| 2 | | January - March | \$ 341,474.67 | \$ 119,516.13 | | | |
| 3 | | April - June | and a second | | | | |
| 4 | | July - September | | | | | |
| 5 | | October - December | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | Tax Rate | | | | | | |
| 10 | 35% | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |

Figure 6-16: Including a reference in a formula

Cross-Reference Other Workbooks

- **1.** Open the workbook to which you want to refer (for example, Workbook2).
- **2.** Click the desired cell in the workbook you want to create a reference (for example, Workbook1).
- **3.** In Workbook1, begin the formula or reference with an equal sign (=).
- **4.** If using a function or formula, enter any portion that you want to precede the cross reference.
- 5. Click the cell that you want to reference from Workbook2.
- 6. Finish any remainder to the formula or press the Enter key. Excel displays the following: the equal sign, an apostrophe, the Workbook2 filename in brackets, the worksheet name, a closing apostrophe, an exclamation point, and the cell reference. For example, [Sales.xls]January'!\$£\$10 refers to the value in cell E10 of the sheet January in the Excel file named Sales. See Figure 6-17 for an example of a cross reference.



Excel uses absolute references (with dollar signs) when referring to other workbooks.

- 7. Open the workbook that contains the cross-reference. Excel display the dialog box shown in Figure 6-18, prompting you to update the cross-referenced cell.
- **8.** Click Update if you want Excel to check the originating workbook for changes to the referenced cell, or click the Don't Update button to leave the cell reference with the last saved contents.

| Ble Edit | Yorw liment Farmat Taolo Data Win | | | | | |
|--|--|---------------------------------|---|---|-------|---|
| Ansi | | ■ X・2111 単同日で・ 人・ビ・ニ 東京 たに・・ | | | | |
| C2 • | A =1st Quarter/E21 | | | | - | - |
| 4 | A | C | D | E | F | - |
| 1 | | NET PROFIT | | | | |
| 2 | January - March | \$ 341,474.67 | | | | |
| 3 | April - June | Proceeding and | | | | |
| 4 | July - September | | | | | |
| 5 | October - December | | | | | |
| | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | - |
| 18 | | | | | | |
| 10 | Quarter / Shid Quarter / Bid Quarter / 4th Quarter | Sammary / | | | | |
| | toShapes->>□○□==0 | | | | | |
| and the second s | | | | | 14.04 | |

Figure 6-17: Create a reference to another workbook

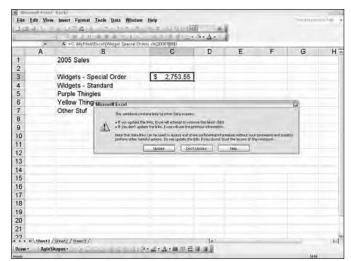


Figure 6-18: Updating a cross-referenced cell



Insert a Hyperlink

- 1. Select a cell or graphic object; then choose Insert Hyperlink. The Insert Hyperlink dialog box, shown in Figure 6-19, appears.
- 2. Select an option depending on what you want to link to:
 - Another file: Locate and select the filename. When the user clicks the link, the referenced file opens.
 - A Web site: Enter the Web address in the Address text box. When the user clicks the link, the browser opens to the referenced Web page.
 - A different cell in the current workbook: Click the Place in This Document button, and then specify which worksheet and cell location you want to reference. When users click this link, they're redirected to the specified cell address.
 - An e-mail: Click the E-mail Address button, and then enter the recipient's e-mail address and a subject. When the user clicks the link, the user's e-mail program starts (see Figure 6-20).
- 3. Click OK.



To remove a hyperlink, right-click the link and choose Remove Hyperlink. The text that was entered for the hyperlink remains in the cell.



Another method to add a hyperlink is with the Excel Hyperlink function. In the cell where you want the link, type **=HYPERLINK** ("FullPathName", "TextToDisplay"). For example, if you type in cell B3 **=HYPERLINK("C:practice.xls", "Click here to open** the practice file"), cell B3 displays Click here to open the practice file, and when you click the link, it opens a worksheet named PRACTICE.XLS. Be sure to include the quotation marks.



Figure 6-19: Creating a hyperlink

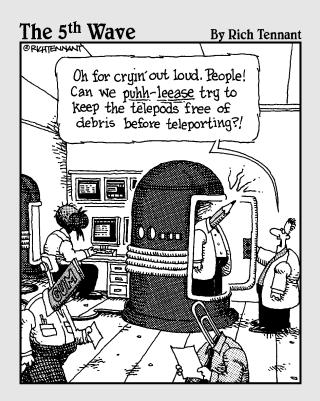
| 912 | | B S M + B B B B C + O + A + N B | | | | |
|------------|---|---|---|--|--|--|
| 912 A | A Dane Koers E- | C D E F G H I | d | | | |
| 1 0 | 2005 Sales | | 4 | | | |
| 5 | | | | | | |
| 3 | Widgets - Special Ordet | \$ 2,773.55 verticion | | | | |
| 4 | Widgets Standard | | | | | |
| 5 | Purple Thingles | (j) Budget gerstions | | | | |
| | Yallow Thinglets | File Edit View Insert Franzis Tools Message Holp 🖉 | | | | |
| 1 | Other Stuff | 2 | | | | |
| 3 | | tend. Peder lado Chad Spelling Attach Printy | | | | |
| 3 1 | | | | | | |
| 0 | | Phote: (reversDigtomost.ret (RAKM43) | | | | |
| 1 | and the second se | III ta cincellonnest.org | | | | |
| 1 3 | Deane Hopers | Mor I | | | | |
| 3 | and the second se | fighter (| | | | |
| 4 | | Silent Budget question | | | | |
| 5 | | THERE IN THE PROPERTY IN | | | | |
| 6 | | | | | | |
| | | | | | | |
| 8 | | Why were the sales of Other Stuff so low this year? Should | | | | |
| 9 | | we increase our advertising? | | | | |
| 0 | | and the second se | | | | |
| 2 | | | | | | |
| 2 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 8 | ets / grout2 / shoet3 / | fat | | | | |

Figure 6-20: Create an e-mail via an Excel hyperlink





Part III Viewing Data in Different Ways



| Chapter 7: Changing Worksheet Views | 67 |
|--|----------------------|
| Zoom In or Out | 68 |
| Split the Excel Screen | |
| Freeze Worksheet Titles | 69 |
| Hide an Open Workbook | 70 |
| Arrange Windows | 70 |
| Compare Spreadsheets | |
| View Excel in Full Screen View | 71 |
| Add Cell Comments | 72 |
| Work with Cell Comments | 72 |
| Save as a Template | 73 |
| Open a Template | 73 |
| Customize Excel Viewing Options | 74 |
| | |
| Chapter 8: Sorting Data | 75 |
| | |
| Use the Toolbar to Sort | 76 |
| Use the Toolbar to Sort Work with the Sort Command | 76 77 |
| Use the Toolbar to Sort | 76 77 78 |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List | 76 77 78 79 |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List Sort by Date, Month, or Custom List | |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List | |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List Sort by Date, Month, or Custom List Search for Data Find All Data Occurrences | |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List Sort by Date, Month, or Custom List Search for Data | |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List Sort by Date, Month, or Custom List Search for Data Find All Data Occurrences Locate Cells Based on Format | |
| Use the Toolbar to Sort Work with the Sort Command Sort by Multiple Criteria Create a Customized List Sort by Date, Month, or Custom List Search for Data Find All Data Occurrences Locate Cells Based on Format Use the Replace Command | |

| Change the Chart Type | 90 |
|--------------------------------|----|
| Include Titles and Labels | |
| Customize the Chart Legend | 91 |
| Modify Chart Attributes | |
| Add Graphic Images to a Series | 92 |
| Change a Chart Location | |
| Add a Data Table | |
| Enhance to a 3-D Chart | |
| Add or Delete Data | 95 |
| Format the Value Axis | |
| Create an Organization Chart | |
| Chapter 10: Printing Workbooks | 97 |
| Spell Check | |
| Preview Before Printing | |
| Add a Manual Page Break | |

| Add a Manual Page Break | 100 |
|---------------------------------------|-----|
| Set a Specific Area to Print | 100 |
| Adjust the Paper Size and Orientation | 101 |
| Make Worksheets Fit Better on a Page | 101 |
| Set Page Margins | 102 |
| Add a Standard Header or Footer | 102 |
| Create a Custom Header or Footer | 103 |
| Specify Repeating Rows and Columns | 104 |
| Print Gridlines and Row and | |
| Column Headings | 104 |
| Print Worksheets and Charts | 105 |
| E-Mail a Workbook | 105 |
| | |

Changing Worksheet Views

Someone once wrote about the importance of seeing and being seen. While I'm sure that quote referred to people, it also can apply to your Excel worksheets. You need to see them in many different contexts. That's what this chapter is about — seeing your workbook from different perspectives:

- Viewing alternatives such as zooming in or out, or seeing the worksheet without toolbars and other screen elements.
- Splitting your screen to see multiple sections of a worksheet at the same time or viewing multiple worksheets together.
- Freezing portions of a worksheet so you can see category or row headings.
- Adding non-printing comments, which are similar to sticky notes for individual cells.
- Quickly and temporarily hiding open workbooks perhaps to protect them from prying eyes.
- Creating templates that can bring consistency, such as the company standards or personal preferences, to your workbooks.
- Options that change the way you view the Excel workbook. For example, see the actual formulas instead of viewing only the formula results.

Go ahead, take a look!

Chapter 7

Get ready to. . .

| ··→ Zoom In or Out68 | |
|------------------------------------|--|
| | |
| | |
| 🛥 Hide an Open Workbook70 | |
| Harange Windows70 | |
| | |
| → View Excel in Full Screen View71 | |
| Here Add Cell Comments | |
| www.work with Cell Comments | |
| ➡ Save as a Template | |
| 🗝 Open a Template73 | |
| | |

Zoom In or Out

1. Choose Viewt⇒Zoom. The Zoom dialog box appears, shown in Figure 7-1.



Optionally, click the Zoom drop-down list on the Standard toolbar.

2. Select a magnification percentage. A higher zoom setting makes the text appear larger so you see less on-screen; a lower zoom setting shows more on-screen, but the data appears smaller. Zooming does not affect the printed data size.



You can select the Custom option and enter your own magnification percentage. Zoom values are from 10 to 400.

3. Click OK.

Split the Excel Screen

- **1.** Click anywhere in a row and column where you want to split your screen.
- 2. Choose Window Split. Excel splits the window horizontally into two or four panes each separated from other panes, by bars. Each pane has its own set of scroll bars (see Figure 7-2).
- **3.** Drag the horizontal split bar up or down or the vertical split bar left or right to resize the window sections.



Choose Window=>Unsplit to remove the split or double-click any part of the bars that divide the panes.

| AI2 | | & Densi | E 8 3 3 1 | | | | | | |
|---------|--------------|-----------------|-----------|----------------|------------------|-------|----------|----------|--------|
| 005.000 | | В | 2 | 0 | E | - E | 0. | Ħ | 1 |
| B | | | | | | A | BC PRODL | iction c | DMPAN |
| 6 | | | | | | UN | IT SALES | BY SALE | SPERS |
| Ealor | sperson | January | February | March | April | May | June | July | August |
| Eab | sperson | 75 | O4 | Joam | 0 | 101 | 93 | 107 | MULUSI |
| 9.53 | 6 | 134 | 103 | Margin married | - | 152 | 140 | 161 | |
| Sam | | 32 | 74 | CAPS | | 73 | 67 | 77 | î |
| Erm | | 86 | 98 | 121000 | | 109 | 100 | 115 | - |
| And | -ini | 147 | 126 | (COM | | 204 | 188 | 216 | 1 |
| Spend | | 92 | 107 | Oym- | 1 | 126 | 116 | 133 | |
| LAlex | | 105 | 91 | Ope. | | 118 | 109 | 125 | 1 |
| Darvis | d l | 210 | 164 | C Et Hearth | | 187 | 172 | 198 | 1 |
| 3 TOT/ | N.S. | 881 | 857 | C Custom: | 75 % | 1,070 | 985 | 1,132 | 1,4 |
| 4 5 8 2 | | | | 06 | Carcal | | | | |
| 5 | | | | - | (Lancason and) | | | | |
| 5 | | | | | | | | | |
| τ. | | | | | | | | | |
| 1 | | | | | | | | | |
| 9 | | | | | | | | | |
| 0 | | | | | | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| a | | | | | | | | | |
| 4. 5 | | | | | | | | | |
| 2 | | | | | | | | | |
| 7 | | | | | | | | | |
| | A CONTRACTOR | set2 / Shoet5 / | | | | 14 | | | 1. |

Figure 7-1: Select a zoom percentage

| | | 0 8 2 3 | 出している | 1.5 米床。 | - 0 - A - | 1.1 | | | |
|---------------|------------|----------|-------|----------|-----------|--------|-----------|---------|----------|
| 10 - | # 106 E | c | B | 6 | н | | | -K | |
| II Alex | 105 | 91 | 100 | 109 | 125 | 156 | 147 | 169 | 184 |
| to (Darve) | 210 | 164 | 243 | 172 | 198 | 248 | 743 | 224 | 189 |
| TOTALS | 881 | 857 | 000 | 085 | 1,132 | 1,423 | 1,338 | 1,403 | 1,413 |
| A | 001 | 0.01 | 320 | 300 | Muse | 4,445 | shood | 17100 | 17113 |
| 5 | | | | | | | | | |
| 0 | | | | | | | | | |
| 7 | | | | | | | | | |
| ð | | | | | | | | | |
| HE / | | | | | | | | | |
| | | | 1 | IT SALES | AUCA | renen | C | | |
| 2.1 | | | 1 | IT DALES | DI ON | LCOPCK | DUN | | |
| 3 | | | | | | | | | |
| 4 Salesperson | January | February | March | June | July | | September | October | November |
| 5 Bob | 75 | 94 | 97 | 93 | 107 | 134 | 126 | 145 | 158 |
| real? a | 134 | 103 | 129 | 140 | 161 | 201 | 189 | 217 | 176 |
| 7 Sam | 82 | 74 | 62 | 67 | 77 | 104 | 98 | 113 | 123 |
| e. Erin | 86 | 98 | 81 | 100 | 115 | 144 | 135 | 155 | 169 |
| 9 Andrew | 147 | 126 | 172 | 188 | 216 | 270 | 254 | 201 | 219 |
| 0 Spencer | 92 | 107 | 106 | 116 | 133 | 166 | 150 | 179 | 195 |
| tt Alex | 105 | 91 | 100 | :109 | 125 | 156 | 147 | \$69 | 184 |
| 2 Deniki | 210 | 164 | 243 | 172 | 198 | 298 | 238 | .224 | 189 |
| 3 TOTALS | 881 | 857 | -990 | 985 | 1,132 | 1,423 | 1,338 | 1,403 | 1,413 |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| ÷. | | | | | | | | | |
| 7 | | | _ | | | | | | |
| 6 | | | | | | | | | |
| 9 | | | 2 | | | | | | |

Figure 7-2: Splitting a window to view different areas of the worksheet simultaneously

Freeze Worksheet Titles

- 1. Choose what you want to freeze:
 - Columns: Select the column to the right of the columns you want to freeze. For example, click cell B1 to freeze only column A.
 - **Rows:** Select the row below the rows you want to freeze. For example, click cell A4 to freeze rows 1, 2, and 3.
 - Columns and rows: Click the cell below the rows and to the right of the columns you want to freeze. For example, click cell B5 to freeze both column A and rows 1 through 4 (as shown in Figure 7-3).
- 2. Choose Window-Freeze Panes. A thin black line appears to separate the sections. As you see in Figure 7-4, as you scroll down and to the left, rows 1, 2, 3, and 4 and column A remain visible even though you see rows 7 through 27 in the bottom section and columns H through P on the right.



Normally, when you press the Home key, Excel takes you to cell A1. However, when Freeze Panes is active, pressing the Home key takes you to the cell just below and to the left of the column headings.

3. Choose Window Unfreeze panes to remove the freeze from row and column headings.

| 85 * | A 75 | and the second se | | | | | | | |
|---------------|-----------|---|-------|-------|-------|----------|--------|--------|-----------|
| 8 | þ | -C | D | F | E . | E | n | 1 | 11 |
| 3. | | | | | A | BC PROD | UCTION | COMPA | NY |
| 2 | | | | | UN | IT SALES | BY SA | LESPER | SON |
| 3 | | | | | | | | | |
| A Salesperson | January | February | March | April | May | Ane | ylta | August | September |
| 5 500 | 75 | -94 | 97 | 112 | 101 | 93 | 107 | 134 | 126 |
| 6 Susan | 134 32 | 103 | 129 | 146 | 152 | 140 | 161 | 201 | 159 |
| 1_Sam | 32 | 74 | 62 | 71 | 73 | 67 | | 104 | - 98 |
| s Enn | 86 | 98 | 81 | 106 | 109 | 100 | 115 | 144 | 135 |
| B Andrew | 147 | 125 | 172 | 196 | 204 | 188 | 216 | 270 | 254 |
| 10 Speraler | 92 | 107 | 105 | 122 | 125 | 116 | 193 | 166 | 156 |
| H Alex | 105 | | 100 | 115 | 118 | 109 | 125 | 156 | 147 |
| 12 Deniel | 210 | 164 | 242 | 157 | 197 | 172 | 198 | 248 | 233 |
| 13 Joe | -49 | 54 | . 59 | 65 | 72 | 79 | 87 | 96 | 106 |
| 14 James | 104 | 114 | 125 | 138 | 152 | 167 | 104 | 202 | 222 |
| 15 Sarah | 70 | 84 | 93 | 101 | 111 | 122 | 134 | 197 | 162 |
| liti Tanka | -40 | 44 | 49 | 55 | 36 | 64 | 70 | 17 | 85 |
| 17 Marvin | 75 | .94 | 97 | 112 | 101 | 93 | 107 | 134 | 126 |
| IE Verti | 134 | 105 | 129 | 148 | 152 | 140 | 161 | 201 | 189 |
| 19 Dotties | -48 | 74 | 62 | 71 | 73 | 67 | 77 | 104 | 96 |
| 31 Onis I | 86 | 98 | 01 | 106 | 109 | 100 | 115 | 144 | 135 |
| 11 Frances | 147 | 126 | 172 | 196 | 204 | 188 | 216 | 201 | 254 |
| za Tim | 92 | 107 | 105 | 122 | 126 | 116 | 133 | 166 | -156 |
| 31 Soott | 105 | 91 | 100 | 115 | 118 | 109 | 125 | 156 | 147 |
| Chris.P. | 210 | 164 | 243 | 182 | 167 | 178 | 198. | 248 | 235 |
| 15 Damin | 163 | 205 | 230 | 258 | 209 | 324 | 363 | -407 | 456 |
| 26 Betty | 99 | 111 | 124 | 139 | 156 | 175 | 195 | 220 | 246 |
| TOTALS | 2,329 | 2.326 | 2.658 | 2,862 | 2.978 | 2.901 | 3.298 | 3.926 | 3,953 |

Figure 7-3: Cells above and left of the current cell will be frozen

| | • 17 + B / 1 | 0.0000 | 图 \$ 16. 1 | 12.2.00.00 | A | 1.00 | | | |
|--------------|--------------|--------|------------|------------|----------|----------|--------|---------|---|
| MGS + | A 641 | | 2 | -TE | | M | 70 | 0 | P |
| | DUCTION | COLIDA | | - 11 | E. | -61 | - 11 | | P |
| 1 | DUCTION | LUMPA | 141 | | | | | | |
| 2 | S BY SAL | LESPER | SON | | | | | | |
| 3 | | | | | | | | | |
| Salesperson | Ally | August | September | October | November | December | TOTAL | AVERAGE | |
| 7 Sam | 77 | 101 | 96 | 113 | 123 | 129 | 1,023 | 35 | |
| a Erin | 115 | 144 | 135 | 155 | 169 | 177 | 1,475 | 123 | |
| a Andrew | 216 | 270 | 254 | 201 | 219 | 230 | 2,425 | 202 | |
| 0 Spender | 133 | 166 | 156 | 179 | 195 | 180 | 1,678 | 140 | |
| 11 Afex | 125 | 196 | 147 | 169 | 184 | 193 | 1,612 | 134 | |
| Deriel | 198 | 248 | 239 | 224 | 199 | 198 | 2.448 | 304 | |
| IB Joe | 67 | 96 | 106 | 117 | 129 | 142 | 1,055 | 35 | |
| a James | 194 | 202 | 222 | 244 | 268 | 295 | 2,215 | 185 | |
| 5 Sarah | 134 | 147 | 162 | 178 | 196 | 216 | 1,619 | 135 | |
| 8 Tanka | 70 | 77 | 85 | 94 | 103 | 113 | 849 | 71 | |
| Marvin | 107 | 134 | 126 | 145 | 158 | 166 | 1,408 | 117 | |
| n Vem | 161 | 201 | 189 | 217 | 176 | 185 | 1,935 | 161 | |
| 9 Delti- | 77 | 104 | 96 | 113 | 123 | 129 | 1,039 | 97 | |
| a Oriali | 115 | 3.44 | 135 | 155 | 169 | 177 | 1,475 | 123 | |
| ti Frances | 215 | 201 | 254 | 201 | 219 | 230 | 2,356 | 196 | |
| Tim | 193 | 166 | 156 | 179 | 195 | 180 | 1,678 | 140 | |
| iii Scott | 125 | 156 | 147 | 169 | 184 | 193 | 1,612 | 134 | |
| A Chris P. | 198 | 248 | 253 | 224 | 189 | 198. | 2,448 | 204 | |
| Damin | 363 | -407 | 456 | 511 | 572 | 641 | 4,439 | 370 | |
| as Botty | 196 | 220 | 246 | 276 | 309 | 346 | 2,307 | 300 | |
| TOTALS | 3,298 | 3,926 | 3,953 | 4,226 | 4,403 | 4,669 | 14,004 | | |
| 28 | | | | | | | | | |
| A . H Sheet3 | - | | | | | | | | |

Figure 7-4: Keep titles visible by freezing the panes

Hide an Open Workbook

1. From an open workbook, choose Windowr⇒Hide. The open workbook hides from view. The Excel program remains open as you see in Figure 7-5, but the workbook itself doesn't display.

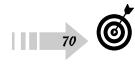


You can't find the hidden workbook name on the Window menu.

- 2. Choose Window ⇒ Unhide. The Unhide dialog box appears, displaying a list of hidden open workbooks.
- **3.** Select the workbook you want to unhide and click OK. The workbook redisplays. Ω

Arrange Windows

- 1. Open two or more workbooks. Choose Windows Arrange. The Arrange Windows dialog box, shown in Figure 7-6, appears.
- 2. Make a selection:
 - Tiled: The open workbooks don't overlap.
 - Horizontal: The open workbooks are stacked on top of each other.
 - Vertical: Lays the open workbooks side by side.
 - **Cascade:** Arranges the windows to overlap each other, keeping the title bar visible.
- 3. Click OK.



Maximize the workbook to return it back to a larger size.



Figure 7-5: Hidden workbooks are open but don't display

| Arrange | Ar | range Windows | |
|-------------------------|----|--|--------|
| ○ Vertical ○ Cascade | An | () []led | |
| | | 5.7 | |
| | | and the second s | rkbook |

Figure 7-6: Arranging to see multiple worksheets

Compare Spreadsheets

- 1. Open two workbooks.
- **2.** Choose Window Compare Side by Side with *other filename*. The two workbooks are split horizontally on the screen and a Compare Side by Side toolbar appears, as shown in Figure 7-7.
- **3.** Click the Synchronous Scrolling button to scroll the two windows simultaneously. Click the button again to scroll them independently.
- **4.** Click the Reset Window Position button if you want to reset the workbook windows to the positions they were in when you first started comparing workbooks.
- *5.* Click the Close Side by Side button to return the windows to normal size.

View Excel in Full Screen View

 Choose View > Full Screen. Figure 7-8 shows a worksheet in full view. Notice the title bar and toolbars are hidden. Besides the worksheet itself, only the row and column headings, the menu bar, and the Full Screen toolbar remain.



If you want to see a particular toolbar while in Full Screen view, choose View=>Toolbars and select the toolbar you want to use.

2. Click the Close Full Screen button to return to Normal view.



If you closed the Full Screen toolbar, restore the screen to normal by choosing View⇔Full Screen.

| DE | # 76 | | | | | | | | |
|--------------------|-----------------|----------|----------|------|-------|----------|---------------------|-----------|----------------------------|
| Inales 1 | a. Academica | | | 624 | AMO | R FIZE | | | |
| A | 8 | C | D | Er | 1.1 | A. | В | 6 | D |
| 1 | - | | | | 12 | | A | MORTIZ | ATION T |
| | | | | | 2 | | | | |
| 2 | | | | | 3 | | Iben amount | | \$60.000 |
| 2 | No. | - | 2000 | | | | antorest rate | | 5.00% |
| 4 Salesperson | | February | March | Apr | 4 | | term (years) | | 10 |
| A_Bob | 75 | 94 | 97 | | 0 | | payment amount | | \$636.39 |
| 6 Susan | 134 | 105 | 129 | | 7 | | e wanted and all | | |
| 7 Sam # Erin | 32 | 74 | 62 81 | | 0.1 | | | | |
| # Erin # Andrew | 147 | 126 | 172 | | -10 | pmt# | month | principal | interest |
| 10 Spincer | 92 | 140 | 106 | | 10 | 1 | Sip-02 | 335.39 | 250.00 |
| 11 Alex | 105 | 91 | 100 | | 11 | 7 | Qc4-02 | 388.00 | 248.39 |
| 12 Daniel | 210 | 164 | 243 | - 11 | 12 | 3 | Nov-02 | 389.62 | 246.77 |
| 11 be | 40 | 54 | 199 | | 13 | - 4 | Dec-02 | 391.24 | 245 15 |
| 14 lames | 104 | 114 | 125 | | 14 | 5 | AM1-03 | 392.87 | 243.52 |
| 15 Sarah | 76 | 84 | 92 | | 15 | | we have by tides 🖛 | | 241.88 |
| 16 Tanka | 40 | -14 | 48 | | 16 | 11 12 | 6 Close Side by Sid | | 240.24 |
| 17 Marvin | 75 | 13.0 | 97 | | 17 | 8 | Apr-U3 | 397.80 | 238.59 |
| 10 Vern | 134 | 108 | 129 | | 18 | 9 | May-03 | 399.46 | 235.93 |
| te Dottie | 48 | 74 | 62 | | 19 | 10 | BO-mit- | 401.13 | 235.27 |
| 20 Chrisk | 86 | 96 | 81 | | 20 | 11 | 304.03 | 402 80 | 233.60 |
| 21 Frances | 1.47 | 126 | 172 | - 11 | 11 22 | 12 | Aug-03 | 404.48 | 231.92 |
| 22 Tim | 92 | 107 | 106 | - | 32 | 13 | Sep-03 | 406 16 | 230 23 |
| 28 Scott | 105 | 19 | 100 | | 23 | 14 | Oct-03 | 407.85 | 228 54 |
| 24 ChrisR | 210 | 164 | 245 | | 24 26 | 15 | Nov-03 Dec-03 | | 226.84 225.13 |
| 25 Dames | 183 | 205 | 230 | | | | | 411.26 | 725.13 |
| s s s s situati / | Grant2 / Stant3 | 1 14 | | | 18. 4 | s # Shee | t1//wee2/Sheet7 | 1 | and an other states of the |

Figure 7-7: Comparing data between two different workbooks

| | A | n. | C | D I | E | P | 0 1 | 100 | 10 | 4 |
|-----|-------------|---------|----------|----------------|-------|-------|----------|--------|--------|-----------|
| | | | | | | A | BC PROD | UCTION | LOMPA | NY |
| l | | | | | | UN | IT SALES | BY SA | LESPER | SON |
| | Salesperson | January | February | March | April | May | Ane | July | August | September |
| | Boh | 75 | 94 | 97 | 132 | 101 | -93 | 107 | 134 | -175 |
| | Suteri | 134 | 103 | 129 | 148 | 152 | 140 | 161 | 301 | 189 |
| | Sam | 2 | 74 | 62 | 71 | 73 | 67 | 77 | 104 | 98 |
| | Erin | 66 | .98 | 81 | 106 | 109 | 100 | 115 | 1.44 | 135 |
| | Andrew | 147 | 126 | 172 | 198 | 204 | 163 | 216 | 270 | 254 |
| ŝ, | Spencer | 92 | 107 | Full same | 144 | 125 | 116 | 133 | 166 | 156 |
| ï | Alex | 105 | 91 | Clese Full Sci | 115 | 118 | 109 | 125 | 156 | 147 |
| | Daniel | 210 | 104 | 243 | 192 | 187 | 172 | 198 | 248 | 233 |
| 1 | low | 49. | 54 | 59 | 65 | 72 | 79 | 87 | 96 | 106 |
| | lames: | 104 | 114 | 125 | 1.88 | 152 | 167 | 184 | 207 | 222 |
| 5 | Sarah | 75 | 24 | 92 | 101 | 111 | 122 | 134 | 147 | 162 |
| 6 | Tarika | 40 | 44 | -64 | 53 | 56 | 64 | 70 | 77 | 85 |
| Ż | Marvin | 75 | 94 | -97 | 112 | 101 | 93 | 107 | 134 | 126 |
| 旺 | Vern. | 134 | 103 | 179 | 18 | 152 | 140. | 161 | 201 | 189 |
| 9 | Dottie | 48 | 74 | 62 | 71 | 73 | 67 | . 77 | 104 | 98 |
| D | Chrisk | 66 | 98 | 81 | 106 | 109 | 100 | 115 | 144 | 135 |
| 6 | Frances | 147 | 226 | 172 | 198 | 204 | 188 | 216 | .301 | .254 |
| a. | Tim | 92 | 307 | 105 | 122 | 126 | 115 | 133 | 166 | 156 |
| | Scott. | 105 | 91 | 100 | 115 | 115 | 109 | 125 | 156 | 147 |
| a. | ChrisR | 210 | 164 | 243 | 182 | 167 | 172 | 196 | 245 | 233 |
| 8 | Damen | 183 | 205 | 230 | 258 | 289 | 324 | 353 | -407 | 456 |
| | Betty | 99 | 111 | 124 | 139 | 156 | 175 | 196 | 220 | 246 |
| ir. | TOTALS | 2,329 | 2,326 | 2,658 | 2,862 | 2,978 | 2,901 | 3,298 | 3,926 | 3,953 |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| ö | | | | | | | | | | |
| n | | | | | | | | | | |
| 12 | | | | | | | | | | |
| ñ. | 1.00 | | | | | | | | | |

Figure 7-8: See more of your worksheet in Full Screen mode

Add Cell Comments

- Select the cell you want to add a comment to. Choose Insert Comment. A small red arrow appears in the upper-right corner of the cell with a yellow note.
- **2.** Enter your comment text in the comment box. Format the text by choosing Format=>Comment.
- 3. Click the mouse anywhere outside of the comment box.
- **4.** Pause the mouse over the red triangle to read the comment. Figure 7-9 shows a comment.



When printing the worksheet, comments do not print.

Work with Cell Comments

- **1.** Right-click a cell with a comment. A shortcut menu appears.
- 2. Select an option from the menu (see Figure 7-10):
 - Show/Hide Comments: Keep the comment visible on-screen.



Optionally, choose View=>Comments to keep comments visible on-screen.

- **Delete Comment:** Get rid of the comment.
- Edit Comment: Make any typing or formatting changes to the comment.



Optionally, control how Excel manages comments by choosing Tools=>Options and making a selection in the Comments section of the View tab.

| 194711 | 1.7.2.11 | A CONTRACTOR OF | e. 8 | and the second second | 100% . | | | | |
|---|----------|---|--|-----------------------|------------|----------|--------|--------|-----------|
| and the second se | | 日田田田田 | 3 2 3 3 | 1.5 课课 | - Or - A - | 100 | | | |
| p4 - | & March | | | | | | | | |
| 4 | B | ¢ | D 1 | | F | 19 | Ħ | T | |
| 1 | | | | | A | BC PROD | UCTION | COMPA | MY |
| 5 | | | | | UN | IT SALES | BY SA | LESPER | SON |
| 3 4 Salesperson | January | February | March | April | May | June | July | August | September |
| 5 Bob | JEARNERY | Gd | 97 | 113 | 101 | 03 | 107 | 134 | 126 |
| a Sism | 154 | 4.52 | 129 | 146 | 152 | 140 | 161 | 201 | 129 |
| 7 Sam | 0 | Diane Korns: | 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | 71 | 13 | 67 | 77 | 104 | 98 |
| a Em | 86 | time this supply? | 81 | 105 | 109 | 100 | 115 | 144 | 155 |
| B Andrew | 147 | | 172 | 198 | 204 | 168 | 216 | 270 | 254 |
| 10/Spender | 92 | 102 | 106 | 122 | \$26 | 116 | 133 | 166 | :56 |
| H Alex | 105 | 91 | 100 | 115 | 119 | 109 | 125 | 156 | 147 |
| 12 (Daniel | 210 | 164 | 243 | 192 | 187 | 172 | 198 | 248 | 233 |
| 15 loe | 49 | 54 | 59 | 65 | 72 | 79 | 87 | 96 | 106 |
| M James | 104 | 114 | 125 | 138 | 152 | 167 | 184 | 202 | 222 |
| (Strat) | 76 | 84 | 92 | 101 | 111 | 122 | 194 | 147 | 162 |
| 15 Tonka | 40 | -44 | -48 | 53 | 58 | 64 | 70 | -77 | 85 |
| 17 Marsin | 75 | 94 | 97 | 112 | 101 | 93 | 107 | £34 | 126 |
| HIL Vern | 1.54 | 103 | 129 | 148 | .152 | 140 | 161 | 201 | 199 |
| H0 (Diffie | 48 | 74 | 62 | 71 | .73 | 67 | | 104 | |
| 20 (Chrisk | 33 | 98 | 81 | 106 | 109 | 300 | 115 | 144 | 135 |
| 21 Frankes | 147 | 126 | 172 | 196 | 304 | 188 | 216 | 201 | 254 |
| 22 Tim | 92 | 107 | 106 | 122 | 126 | 116 | 133 | 166 | 156 |
| za Soott | 105 | 91 | 100 | 115 | 118 | 109 | 125 | 156 | 147 |
| 24 Chris R | 210 | 164 | 243 | 182 | 187 | 172 | 198 | 248 | 233 |
| as Darren | 183 | 205 | 230 | 258 | 289 | 324 | 363 | 407 | 456 |
| at Batty | 99 | 111 | 124 | 139 | 156 | 175 | 196 | 220 | 246 |
| TOTALS | 2.329 | , 2.326 | 2,658 | 2,862 | 2.978 | 2.901 | 3.298 | 3.926 | 3.953 |

Figure 7-9: View cell comments

| falleost - | 6 10 F | 0 8 8 8 8 | 9.1 % 1.5 | 1.5 戸床 | - ά+ <u>Δ</u> | 3.6 | | | |
|---------------|-------------------------|--|----------------------|--------|---------------|----------|--------|--------|-----------|
| A | B | C | (B) 1 | E | F | - 10 | н | T | 1.1.2 |
| 1 | | | | | A | BC PROD | UCTION | COMPA | NY |
| 5 | | | | | UN | IT SALES | BY SAL | ESPER | SON |
| T. | | | | | car to | | | | 0011 |
| 4 Salesperson | January | February | March | April | May | June | July | August | September |
| 5 Bob | 75 | 94 | 97 | 112 | 401 | 95 | 107 | 134 | 126 |
| i Susan | 154 | 103 | 129 | 146 | 152 | 140 | 161 | 201 | 189 |
| Sam | 37 | Ger | | 71 | 73 | 67 | 77 | 104 | 98 |
| 8 BTI | 85 | | | 106 | 109 | 100 | 115 | 144 | 135 |
| Andrew | 19.1 | Copy | | 198 | 204 | ,168 | 216 | 270 | 254 |
| 0 (Spencer | 9. | P.mm | | 122 | 126 | 116 | 133 | 166 | :56 |
| 1 Alex | 103 | Paste Sparks | L | 115 | 118 | .109 | 125 | 156 | 147 |
| 12 (Daniél | 210 | imert | | 192 | 187 | 172 | 196 | 248 | 233 |
| 5.ke | 45 | Datete | | 65 | 72 | .79 | 87 | 96 | 106 |
| A James | 10- | | 1 m | 138 | 152 | 167 | 184 | 202 | 222 |
| (Sarah | 78 | Clear Conten | | 101 | 111 | 122 | 134 | 147 | 162 |
| 5 Tonka | 4 | di Ldii Commen | | 53 | 58 | 64 | 70 | 77 | 105 |
| 7 Marin | 710 | Balete Cogan | ent n | 112 | 101 | 95 | 107 | 134 | 126 |
| III Vern | 1.81 | Skyw Hide C | mment | 148 | 157 | 140 | 161 | 201 | 190 |
| 0 (DC/the | 4 | Format Cellis | a second a second as | 71 | 73 | 67 | 77 | 104 | 98 |
| 0 OVISK | 8. | | op alswei Liet_ | 106 | 109 | | 115 | 144 | 135 |
| H Frankes | 14 | Add Watch | charmy ruc- | 196 | 304 | 188 | 216 | 201 | 254 |
| 2 Tim | 0.1 | 1. | | 122 | 126 | 116 | 133 | 166 | 156 |
| the South | fot | Greate List | | 115 | ILB | 40£ | 125 | 156 | 147 |
| A Chris R | 210 | Hyperfink | | 182 | 187 | 172 | 198 | 248 | 233 |
| s Darren | 18 | Look Up | | 258 | 289 | 324 | 363 | 407 | 456 |
| a Betty | 99 | 111 | 124 | 139 | 156 | 175 | 196 | 220 | 246 |
| 7 TOTALS | 2.329 hours / shouts | 2.326 | 2.658 | 2.862 | 2,978 | 2,901 | 3,298 | 3.926 | 3.953 |



Save as a Template

- 1. Create an Excel workbook. Templates can store cell, worksheet and page formats, print settings, styles, the number and type of sheets in a workbook, protected and hidden areas of the workbook, page headers, row and column labels, data, graphics, formulas, charts, data validation settings, custom toolbars, macros, hyperlinks, and workbook calculation and window view options.
- 2. Choose File Save As. The Save As dialog box appears.
- 3. Type a name for the template in the File Name text box.
- **4.** Choose Template from the Save As Type drop-down list. Excel automatically saves the template in the default template location (see Figure 7-11).
- **5.** Click the Save button.
- 6. Close the workbook.

Open a Template

1. Choose File New. The New Workbook task pane opens.



Clicking the New button on the Standard toolbar automatically creates a new blank worksheet, not from a specially saved template.

2. Click On My Computer. The Templates dialog box, shown in Figure 7-12, opens.



Click Templates on Office Online in the New Workbook task pane to view a great collection of mostly free templates.

- **3.** Select the template you want to use.
- 4. Click OK.

| Arial | | Save As | - | 1.1.1 | - | شنايا | 121 | 2.2 | | · A- | 5.R. | - | 101 | | |
|-------------------------------------|--|-----------------------|---------|-------------|------|----------|-----------|------|------|------|------|---------------------|-----|---|---|
| | A | Jave ins | n | 103 Teriste | 103 | | _ | - | -121 | 210 | -00 | | | н | 1 |
| 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 | Revenues Evait West North South Total Revenues Expenses Supplies Wages Office Expense | The Date of the State | e et la | KLA KOGEN | - 10 | ad Lades | Depress | | | | | | | | |
| 16 | Ublithes Auto Expense | | | (mgma. | | an Same | rk by Qaw | ter: | | | | 8 | | | |
| 18 | Other | - | | Live in tra | TH | gide | _ | _ | - | _ | | Concilia - Concilia | | | |
| 19 | Total Expenses | - | \$ | - | \$ | - | 1 | Ċ | \$ | ~ | | | | | |
| 21 | Net Profit | | \$ | | 1 | - | \$ | | \$ | - | | | | | |

Figure 7-11: Saving a template

| Workbook AIA FORM - Bill of Lading Expense 10 report2 | Preview |
|--|------------------------|
| Income Statement by | Preview not available. |
| Quarter | PTEVIEW INC AVAIIADIE. |

Figure 7-12: Create a new file based on a template



Customize Excel Viewing Options

- 1. Choose Tools=>Options. The Options dialog box appears.
- **2.** Click the View tab (see Figure 7-13) and then select any desired options:
 - Show: Select the items you see on the screen such as the formula bar or status bar. If you remove the check mark from the Startup Task Pane, Excel only displays the task pane if you select an option that requires it such as when inserting clip art.
 - Comments: Determine how you want to see cell comments (see the "Work with Cell Comments" section, earlier in this chapter).
 - **Objects:** Establish whether or not to display objects such as arrows, clip art, or text boxes, or to show only a placeholder for them.
 - Window Options: Select the Formulas option to turn on formulas; Excel displays the formula in a cell, not the result (see Figure 7-14). This is extremely helpful when troubleshooting formula problems. Additionally, select the Zero Values option to leave the cell blank or with a dash if the cell value is zero.



Control the gridline display in the Window Options category.



Click the General tab and choose R1C1 reference style if you want Excel to display the columns in numbers instead of alphabetic characters.

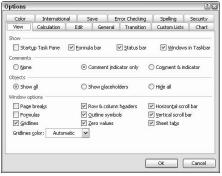


Figure 7-13: Customize Excel viewing options

| 44 - 17 - 1 65 - A-P | VU WWWHE * | ···· ★ ····· ★ | 100 | |
|---|---|---|----------------------------------|--------------|
| | n | E | 1 | 15 |
| Distance in the local | TION COMPAN | V. | | |
| | | | | |
| - Makeba | ALL DISCOURSE OF ALL ALL ALL ALL ALL ALL ALL ALL ALL AL | | | |
| Salesperson | March | INTOTAL | AVERAGE | RATIO |
| 16vab | 97 | =SLM(85:D5) | =AVERAGE(B5:D5) | *E5/\$E\$13 |
| Susan | 129 | =SLM(B6:D6) | AVERAGE(B6:D6) | =E6/\$E\$13 |
| Sam | 162 | =SUM(B7:D7) | AVERAGE(B7:D7) | =E7/SE\$13 |
| Enn | 81 | =SLM(B8:D8) | =AVERAGE(B8:D8) | *E8/\$E\$13 |
| Andrew | 172 | -SUM(B9:D9) | AVERAGE(B9:D9) | =E9/\$E\$13 |
| Spencer | 106- | =SUM(B10:D10) | AVERAGE(B10:D10) | =E10/\$E\$13 |
| Li Alux | 100 | =SUM(B11:D11) | =AVERAGE(B11:D11) | #E11/\$E\$13 |
| Daniel | 243 | -SUM(B12:D12) | = AVERAGE(B12:D12) | =E12/\$E\$13 |
| TOTALS | SUM(D5:D12) | -SUM(ES:E12) | - Contraction of the second cont | =SUM(G5:G12 |
| A CONTRACTOR OF A CONTRACTOR OFTA CONT | | | | |
| i. | | | | |
| | | | | |
| | | | | |
| 1 | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 8 | | | | |

Figure 7-14: Analyze Excel formulas with formulas displayed

3. Click OK.

Sorting Data

Sometimes worksheets become quite large, which makes it time-consuming and difficult to locate particular pieces of information. If your data is in an array, you may find the data easier to view if it is sorted in a particular manner.

Perhaps you have multiple worksheets and you want to locate every occurrence of a specific value. Or, maybe you're just a neat freak and want everything to be in a particular order. Excel contains features to help keep your worksheets in an easy-to-manage sequence.

Here's what you can expect in this chapter:

- Sort your data in ascending or descending order using either the toolbar or the Excel Sort dialog box.
- Perform a secondary sort if the primary sort has multiple matches.
- Sort data containing days of the week or month names.
- Create a customized list of frequently used names or terms.
- Locate cells containing data you specify, whether the data is part of a formula or a resulting cell value.
- Quickly replace data containing certain information with another specified set of data.
- ➡ Locate all cells with a particular style of formatting and easily replace them with a different format.

Chapter 8

Get ready to. . .

- → Locate Cells Based on Format82
- → Use the Replace Command83

Use the Toolbar to Sort

- **1.** Create a list in contiguous order with headings specifying the contents of each column. Figure 8-1 illustrates an ideal data array.
- **2.** Click any cell containing data in the column by which you want to sort.



If the data is in a connected list, you do not have to select it first. If the data is not in an adjoining list, you must first select the entire list. If unselected data is in columns next to the selected data, Excel may prompt you for more information.

3. Click the Sort Ascending button. Excel sorts the entire list in ascending order. Text is sorted A–*Z*; numbers are sorted 1–10; and dates are sorted earliest to last.



Excel sorts in the following pattern: numbers, spaces, special characters (which are ! " # \$ % & () * , . / : ; ? @ [\]^_`{|}~ + <= >) and finally, alphabetic letters.

4. Click the Sort Descending button. Excel sorts the entire list by descending order, as shown in Figure 8-2. Text is sorted Z-A; numbers are sorted 10–1; and dates are sorted last to earliest.



If you do not see two sorting buttons (Ascending and Descending), choose View=>Toolbars=>Customize and select the Show Standard and Formatting Toolbars on Two Rows option. Click the Close button and you can see both the Ascending and Descending Sort buttons.



If Excel incorrectly sorts a cell that contains a value, make sure the cell is formatted as a number and not as text.

| | | Escal Masic List | | | | | | - 20 | 14 |
|-------|---------|--|--|--|--------------|---------|-----------|-------|----|
| | 1000 | fit View Insert Format Tools Data Win | And the second sec | | | 100.000 | intra mai | • • | 9 |
| 10 | 3 G. | 3 4 4 3 7 12 A 4 3 - 7 | - B. E - 11 11 41 45 1000 | 2.8.9 | | | | | |
| And | | - 10 - B / U B B B - + 5 5 | · 12.2 2 2 | -34 | | | | | |
| 1 | ct. | John Cougar Millancame | | | | | | | |
| 100 | A | B | 8.0m E | P | E | Ŧ | 6 | H | |
| CL. | Track | Name | Artist | Rating | | | | | |
| 23 | 1 | Hern Country | Alabama | | Sunday | | | | |
| £){ | 2 | Cowtoy Love | John Michael Mohtgemery | 7 | Thursday | | | | |
| 4/ | 3 | It Elosent Get Any Countrie Than This | Tirri McGraw | 7. | Siturday | | | | |
| 10 | 4 | Lisuimaria Mari | Rick Nelson | 1. | Monday | | | | |
| 5 | -5 | One Night Stand | Rick Nelson | . 3 | Fnday | | | | |
| 71 | 6 | Rain on the Scarecrow | John Cousir Mellencamp | 1 | Triesday | | | | |
| 8 | + | Something to Talk About | Bannie Fratt | 6 | Wastiday | | | | |
| 8 | 8 | Steck on You | Elve Pirvales | T | Windownikity | | | | |
| á l | . 6 | Third Rock from the Sam | the Diffe | 4 | Sunday | | | | |
| 11 | 10 | Acte-Breaky Heart | EMIy Ruy Cynim | 1 | Fnday | | | | |
| 10.00 | tt | Give it to Me Strait | Tim McGrew | 3 | Tumpday | | | | |
| 3 | 12 | / Warns Talk About Ms | Toby Katti | 2 | Satuday | | | | |
| ā (| 13 | Night Tran To Memphys | Rick Nelvon | 1 | Montlay | | | | |
| 8 | 14 | Sold, The Grunty Courty Auction Incident | John Machael Montgamers | 3 | Sauring | | | | |
| 5 | 15 | Except for Monitary | Lorrie Morgan | - K | Saturday | | | | |
| 7 | | Small Town | John Coutar Mellencame | | Thursday | | | | |
| 8 | | Truth Ditwit Man | Des Nation | | Tuesday | | | | |
| ŝ | | Two of a Kind, Worker on a hus Pouse | Garth Brooks | | Saluday | | | | |
| 0 | 19 | Dawn on the Farm | Tim McGraw | | Enday. | | | | |
| 1 | 10 | Every Time You Say Goolbye | Alson Knuns | | Saturday | | | | |
| | 21 | they time the say when ye have been been been been been been been be | Auson Krisulla EMa Presivy | | Monday | | | | |
| 12 | | | | 2 | | | | | |
| 84 | 23 | I Gitta Anow | Elect Pressey | | Wednesday | | | | |
| 4 | | Pickup Man | | 5 | Friday | | | | |
| 5 | | Friends in Low Flaces | Gath Broaks | 3 | Sanuday | | | | |
| 6 | -25 | Watch Ma | Lorne Motgan | 1 | Saturtiky | | | | |
| 7 | 25 | Telephone Man | Meri Witson | 6 | Tuesday | | | | |
| 8 | 37 | Itolian Outlan | Tim McGnw | | Fentsy | | | | |
| 9 | | Pull My Chain | Today Hould | 6 | Monitay | | | | |
| 0 | 29 | Roll on (18 Wheeler) | Alabienta | 1 | Hursday | | | | |
| 1 | | Pethod Dreams | Tim McGnw | - I | Saturday | | | | |
| 21 | л. | Where Were 150 When the World Straped Tumma heat1 / Sheet2 / Sheet3 / | Alan Jack een | 1 | Wednesday | | | | |
| 1.1 | | | | | | | | 1 | 3 |
| Deare | 10.00 | AutoShapen- N N C C 2 4 /2 (5) 4 | 2・2・2・音=日言言。 | | | | | | |
| eady | | | | 2 | | | NAME. | | |
| 24 | 14/1724 | L'EDITION CONTRACTOR | Latteraries and the second second | the state of the s | | | CHEL | in an | ŝ |

ABC PRODUCTION COMPANY UNIT SALES BY SALESPERSON AVERAGE RATIO 4 Salesperson TOTAL 5 Danie 617 206 148 122 102 23% 126 103 107 91 6 Antrew 140 15% 13% Susan. 134 129 106 100 366 11% a Spencer 97 305 99 11% 296 B Alex 10 Bob 89 266 10% 265 88 10% 12 Sam TOTALS 881 990 100% 857 2,728 * * # Sheet1 (2) / Grant1 / Urant2 / Grand / Draw- AutoShapen- S S CI Cos

Figure 8-2: A sorted data array

Figure 8-1: Data for sorting

Work with the Sort Command

- 1. Select or click in the list of data you want to sort. Select only a single column of data if you want to sort that column independently of the rest of the data.
- Choose Data ⇒ Sort. The Sort dialog box opens (see Figure 8-3).
- **3.** If your data includes column headings, select the Header Row option in the My Data Range Has section. If it doesn't include column headings, select the No Header Row option. Excel does not include header rows in the sort process.
- **4.** From the Sort By drop-down list, select the column by which you want to sort (see Figure 8-4).



If you do not have header rows, Excel displays Column A, Column B, and so forth.

5. Select whether you want to sort the data in ascending or descending order.



Click the Options button if you want to make the sorting case sensitive (noncapitalized words before capitals). This option is not available in PivotTable reports (see Chapter 13).

6. Click OK. Excel sorts data in the following order: numbers, special characters, and finally alphabetic characters. Blanks are always placed last.



When sorting an outline, Excel sorts only the highest-level groups. This keeps the detail rows or columns together, even if hidden. (See Chapter 11.)

| | A2. | · A1 | | | | | | | |
|-----|---------|--|--|--|------------|------------|-----|----|-----|
| | A. | E | | | 1.0 | E. | . F | 15 | H |
| 12 | Track | Name | Artist | - 20 | Rating | | | | |
| 21 | T | Barn Country | Alabama | | 4 | Semilar | | | |
| 3,1 | 2 | (Coultry Low | John Michael M | systemal | 1 | Thursday | | | |
| 41 | 1.2 | # Doesn't Get Any Countries Than This | Tim McGraw | | 7. | Silverlay. | | | |
| 5 | 4 | Lipuesiana Man | Dol. Stelan | | ĩ. | Monday | | | |
| 6 | 5 | One NaM Stand | Surf | UU U | 3 | Friday | | | |
| 71 | 16 | Rain on the Scanecrow | hitte. | and the second se | 4 | Torsday | | | |
| 6.1 | 7 | Something to Talk About | Track w | C Scendro | 6 | Trunder | | | |
| | 8 | Struck on You | Trade. | Operending | T | Wednesday | | | |
| 6 | - 6 | Third Rock from the Sun | and the second sec | Collectioned | 4. | Sunday | | | |
| 71 | 10 | Achy-Breaky Heart | Theri fu | | 2 | Friday | | | |
| 5 | 11 | Giver it to Me Strad | v | Aspending | 3 | Tuesday | | | |
| 81 | 12 | (Warna Talk About Me | 1 | Citeroreging | 2 | Saturney | | | |
| 21 | 13 | Nutt Tran To Memoties | "Thetim- | Contract | 1 | Montiav | | | |
| 5 | 14 | Sold, The Grienty County Auston Incident | | (P) According | - | Sitterney | | | |
| 윩 | 15 | Except for Montay | | Chesceving | | Saturday | | | |
| 7 | 16 | Small Town | millionardispelles: | | - | Thursday | | | |
| 8 | 17 | Truck Davis Man | | 1000000 | 1 | Tureday | | | |
| 왉 | 10 | Two of a Kind, Workin on a Fus Plause | (e) teader toe | AD THAT BOR YOU | - | Saturday | | | |
| 릙 | 19 | Down on the Farm | (manage and | and the second s | - | Friday | | | |
| 94 | 20 | Every Time You Say Greedaye | 38m. | DK GANNA | 2 | Siturday | | | |
| 54 | 21 | Hound Con | Elen Pratier | | | Monday | | | |
| 4 | 22 | Linta know | Elico Presley | | | Wethening | | | |
| | 23 | Picaup Man | Joe Differ | | | Finkey | _ | | |
| 4 | 20 | | | | - 2 | | | | |
| 5 | | Friends in Low Places | Garth Brooks | | 3 | Saturday | | | |
| 61 | 25 | Watch Me | Lome Morgan | | 1 | (Saturday | | | |
| Χ. | 26 | Talephone Man | Meri Wilton | | | Tunnitey | | | |
| 21 | 27 | Holian Cultaw | Tim McGnew | | - 5 | Entlay | | | |
| 2 | -28 | Pull My Chain | Tony Keith | | 6 | Monday | _ | | |
| 0 | 29 | Roll on (18 Whenlar) | Alabares | | 1 | Thursday | | | |
| 1 | 36 | Refined Dreams | Tim McGnw | | 1. | Situritay | _ | | |
| 21. | R | Where Were You When the World Stopped | Turning Alah Jackson | 100 | 1 | Wednesday | | | |
| - 6 | 1 11 19 | heet1/sent2/sent3/ | | 10 | | | | | 1.3 |

Figure 8-3: The Sort dialog box



Figure 8-4: Select the sort column

Sort by Multiple Criteria

- Select or click in the list of data you want to sort. Choose Data Sort.
- **2.** If your data includes column description headings, select the Header Row option in the My Data Range Has section.



Although the most common sort is to sort by rows, you can also sort by columns. In the Sort dialog box, click the Options button, choose Sort Left to Right in the Orientation section, and then click OK.

3. From the Sort By drop-down list, select the first column by which you want to sort. Choose whether to sort the first criteria in ascending or descending order.



Excel sorts dates formatted with slashes such as 11/22/68 as numeric data. Dates with the day or month spelled out must be sorted differently. See the later section, "Sort by Day, Month, or Custom List."

- **4.** Click the Then By down arrow and select the column you want to sort by if two or more items are identical in the first Sort By option. See Figure 8-5.
- *5.* Choose whether to sort the second criteria in ascending or descending order.
- 6. (Optional) Repeat Steps 4 and 5 for a third criterion.
- **7.** Click OK. Excel performs the sort process. Figure 8-6 illustrates data rows sorted first by Artist, and then by Song Title.



During an Excel sort, apostrophes (') and hyphens (-) are ignored, unless two text strings are the same except for a hyphen. In that situation, the text with the hyphen is sorted as the latter.

| Sort | | ? × |
|---------------------|----|-----------------------|
| Sort by | | |
| Artist | ~ | Ascending |
| | | O Descending |
| Then by | | |
| Name | ~ | Ascending |
| | | O Descending |
| Then by | | |
| | ~ | Ascending |
| | | O Descending |
| My data range has - | | |
| Header row | OM | lo header ro <u>w</u> |
| | | |
| Options | | OK Cancel |
| | _ | |

Figure 8-5: Select a second sort criteria

| | | Escal Masic List | | | | | | 24 |
|-------------|---------|--|-----------------------------|--------|------------|--------|----------|---------------|
| 21 | Elle E | fill View Insett Format Tools Data Win | | 100 | | 10.000 | mate and | * - 6 |
| 20 | 2.4 | 3 1 4 2 7 12 4 4 3 5 7 4 | - B. E - 01 11 40 45 1000 - | - 16.0 | | | | |
| And | | * 10 * B / U B B B | · 12 | -348 | | | | |
| | đ | K Atan Jackson | | | | | | |
| | A | B | a da C | D. | E | F . | 6 | H |
| | Track | Name | Artist | Rating | Play Bate | | 25 10 | |
| 21 | 1 | Ban Country | Alabama | | Sanday | | | |
| 61 | 36 | High Cotton | Alabama | - 6 | Monday | | | |
| 4/ | 29 | Roll on (18 Wheeler) | Alabama | 1 | Thursday | | | |
| 51 | 35 | Song of the South | Alabama | 2 | Trunsday | | | |
| 6. | 34 | That'd Ba Aleght | Alan Jacknan | . 3 | Sanday | | | |
| 7 | -99 | When Love Crimes: Around | Alan Jackiem | 4 | Sittertity | | | |
| 8 | 31 | Whom Were You When the World Slopped Turning | Alan Jackson- | 1 1 | Wednesday | | | |
| 81. | 20 | Every Time You Say Gootbye | Alson Krauna | 5 | Shurthy | | | |
| ő. | 35 | When Gidd Digs His Peri of Liss in My Heart | Akton Kraunt | 1 | Friday | | | |
| 1 | 10 | Achy-Breaky Heart | Billy Ray Cysic | 1.2 | Fnday | | | |
| 2 | 7 | Something to Talk About | Barrae Rudt | 6 | Trarebox | | | |
| ā. | 37 | All Shook Up | ESAs Presky | -5 | Transfay | | | |
| 4 | 21 | Hound Dog | Elec Freday | 3 | Monday | | | |
| 5 | 22 | 1 Getta Know | Elec. Prestory | 4 | Wednesday | | | |
| n (| 12 | Jaihouse Rock | Elins Prastery | T | Fnitsy | | | |
| 7 | 47 | Higher Cousins | Eleo Presley | 5 | Monday | | | |
| 8 | A NOT | Stack on Yeu | Eles Presting | U. | Wednessia | | | |
| 9 | | Wear my Ring Acound Your Neck | Esta Presky | 2 | (Sanday) | | | |
| 0 | 24 | Friends in Low Places | Garth Erooke | 3 | (Saturday, | | | |
| 1 | 18 | Twe of a Kitel, Werkin' on a Full House | Gath Brooks | 1 | Saturday. | | | |
| 2 | 23 | Elickup Man | Jon Diffe | 5 | Friday | | | |
| 8 | .9 | That Rock from the Sun | Lite Diffe | -4 | Sunday | | | |
| 4 | 41 | R O.C.K = the U.S.A | John Cooger Mellencemp | 6 | Fnday | | | |
| 5 | 6 | Rain on the Scategrow | John Cougar Mailancomp | 1 | Tuesday | | | |
| 6 | 16 | Small Town | With Colligie Mellencarrip | 2 | Thursday | | | |
| 7 | 3 | Coebay Love | John Michael Montgomery | 1 | Runber | | | |
| 8 | 38. | th What (Am | John Mehael Martgemery | 4. | Wednesday | | | |
| 9 | 94 | Sald, The Grandy County Austrian Incident | Jobn Michael Montgomery | 3 | Saturday | | | |
| 0 | 15 | Except In Monday | Lottie Morgan | 5 | Saturday | | | |
| 1 | 32 | 1 Didn't Know My Own Strength | Larris Morgan | 2 | Turnday | | | |
| <u>2</u> [. | 16 | Watch Me | Lone Morsen | T | Saturday | | | |
| | | heet3 / Short2 / Sport3 / | I. | 4 | | | | |
| Dem | | AutoShapen · · · · · · · · · · · · · · · · · · · | >・止・ム・毎三日333 | | | | | |
| eody | 6 | | | | | | CAH MAH | |
| 20 | 24/17/4 | | Million Internet | - | All Lands | | Cies | all the state |

Figure 8-6: A data array sorted by multiple criteria

Create a Customized List

- 1. Choose Tools >Options. The Options dialog box appears.
- **2.** Click the Custom Lists tab. Excel provides two ways to create a custom list:



A custom list can contain text or text mixed with numbers. Use custom lists to speed up data entry for commonly used terms such as salespeople, regions, or products.

- To create a list from items you already have entered into the worksheet, click the worksheet icon next to the Import button. The Options dialog box collapses. Highlight the worksheet cells containing your list; then press Enter. The Options dialog box reappears. Click the Import button. The data you selected appears in both the List Entries box and the Custom Lists box (see Figure 8-7).
- To type your own list, without entering it into the worksheet first, select New List from the Custom Lists section. Type your list in the List Entries text box (see Figure 8-8) separating each list item with a comma, and then click the Add button.
- 3. Click OK.



You can now use the AutoFill feature with the custom list by typing one list entry and using AutoFill to enter the other list entries. See Chapter 2.



To edit a custom list, choose Tools⊏>Options. From the Custom Lists tab, select the list that you want to edit. Make any desired changes in the List Entries box, and then click Add. To delete a customized list, select the list and click Delete. You cannot edit or delete the Excel provided fill series such as months and days.

| F | A5 + | A: Dariel | | | | | |
|-----------------|------------|---|--|---|--------------|-----|---------|
| 1 | | D | C 0 | 1 1 1 | 6 | 0 0 | - 1 |
| 1 | | ABC PE | ADDUCTION COM | PANY | O.K | | |
| 2 | | UNIT SA | | Save Tryo Oeding spell | to Secure | 1 | |
| L S | alesperson | January | Cator Mr. | Lateriver | titti Out | - | |
| ASSABBB | do | 210 147 134 92 105 75 86 32 881 | New WDT San, Hen, Low, Wed, Thu, He, T Sunday, Honder, Lunday, We San, Hall, New, An Men, Jun Sanway, Reputer, Kan Men, And Tanang, Baban Low, Mech, April Tanang, Baban Low, Mech, April Tanang, Baban Low, Kan Mech, April Press, Tables to separate let ever grant lat from cells. | Carant Andrem Salann Spannae Alan Bob Ens Salan Salan | Add Dente | | |
| 7 0 0 0 0 0 0 0 | | | | |] [Lavel | | |

Figure 8-7: Create your own custom lists from data in your worksheet

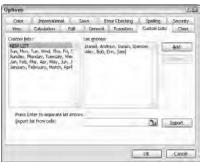


Figure 8-8: Manually create a customized list



Sort by Day, Month, or Custom List

1. Select or click in the list of data you want to sort. Choose Data=>Sort. The Sort dialog box appears.



Excel sorts numbers first, and then text. If your data includes values designated as text, Excel prompts you before the Sort dialog box appears how you want these cells handled. You can choose to keep the numbers as text values, or sort them as numbers. If you sort them as numbers, both numbers stored as text and actual numbers are sorted together.

- **2.** If your data includes column description headings, click the Header Row option in the My Data Range Has section.
- **3.** Specify the order in which you want the data sorted and whether to sort in ascending or descending order (see Figure 8-9).



If you're sorting on days of the week or months of the year, the data must be spelled out completely (for example, September or Tuesday), or abbreviated to the first three characters only (for example, Sep or Tue).



By default, Excel sorts days and months alphabetically instead of by date. To sort days or months by date, or to sort a custom list, the day, month, or list column must be the first sort criteria.

4. Click the Options button. The Sort Options dialog box opens.



80

Unless you specify otherwise, Excel sorts customized lists alphabetically instead of list order.

- 5. Select a sort order from the available list. (See Figure 8-10.)
- *6.* Click OK twice to perform the sort.

| nding ending |
|-----------------|
| |
| nding |
| indan ing |
| |
| nding |
| ending |
| |
| nding |
| ending |
| |
| <u>w</u> |
| |
| Cancel |
| |

Figure 8-9: To sort days or months click the Options button

| | A2. | * A1 | | | | | | |
|----------|-------|---|---|-------------------|------------|---------------|---|---|
| 18 | A. | E | | Q | E. | F | 6 | н |
| 13 | Track | Name | Artist | Rating | | | | |
| 68 | . T | Bern Country | Alabama | | Semlay | | | |
| 5.1 | 2 | Cowboy Love | John Michael Mottgomery | 1 | Thirday | - | | |
| 91 | 1.2 | It Doesn't Get Any Countries Than They | Tim McGraw | 7 | Saturday | 1 | | |
| 21 | 4 | Esuissiana Man | Dash Belevan | 1 | Monday | | | |
| 6 | 5 | One Naht Stand | Sart | 1 | Friday | | | |
| | 6 | Rain on the Scatterow | -matte | 1 | Tortday | | | |
| 5 | 1 | Something to Talk About | in all The secondary | 6 | Tranter | | | |
| | 8 | Spack on You | Sert Options | II J | Wednesday | | | |
| 81 | -9 | Third Rock from the Sun | Sen Operas | | Sunday | | | |
| 21 | 10 | Ache-Elreaky Heart | East key sort order | | Fuday | | | |
| 솪 | 11 | Give it to Ma Strad | Sunday, Monday, Tuesday, Wedr - | 5 1 5 | Tuesday | | | |
| ēł. | 10 | I Warna Talk Abtud Ma | Figures | | Saurie | | | |
| 81 | 11 | Nutt Tran To Memohin | Him Man Tun Hard The Rel Cal | incol | | | | |
| 5 | | | Durolas Musica, Fuedday, Marki | | Monday | | | |
| 21 | 14 | Seld, The Grendy Charity Aucton Incident | Sen, Feb, Mar, Apr, Mey, Xan, XA, January, February, March, April, F | | Saturday | | | |
| 5 | 括 | Except for Monday | Daniary, February, March, April, F Daniel, Andrew, Sukan, Spenov, L | | Saturday | | | |
| T. | 16 | Small Town | hand many more service. | | Thursday | | | |
| 81 | 17 | Truck Dmin' Man | THE | | Tursday | | | |
| 9. | 18 | Two of a Kind, Workin' on a Fus House | | 1 | Saturday | to be and the | | |
| 10 | 19 | Down on the Farm | Q0000 18 1 Cm | 4 | Fritay | | | |
| | 20 | Every Time You Say Gredbye | International Associations internation | | Suturday, | | | |
| 21 | 21 | Hound Dog | Elect Prastoy | 3 | Monday | | | |
| <u>a</u> | 22 | I Gotta Holow | Elvo Presley | 4 | /Webbility | | | |
| 61 | 23 | Pickup Man | -Joe Differ | 4 | Friday | | | |
| ē. | 24 | Friends in Law Places | Garth Brooks | | Saturday | | | |
| 8 | 25 | Watch Me | Lome Monzan | 1 | Saturday | | | |
| 94 | 26 | Talephone Man | Meni Wildon | | Tunches | | | |
| | 27 | Inclian Colline | Tim McGrew | ě. | Entlay | | | |
| č. | 28 | Pull My Chain | Tony Keith | - | Monday | | | |
| | 29 | Roll on (IB Weeslary | Alabarea | 1 | Thursday | | | |
| 1 | 30 | Refined Dreams | Tim McGraw | 4 | Siturday | | | |
| 21 | | Where Were You When the World Stopped heret1 / Short2 / Short3 / | | the second second | Wednesday | | | |
| | | | | | | | | |



Search for Data

- 1. Choose Editt Find (or press Ctrl+F). The Find and Replace dialog box, shown in Figure 8-11, appears.
- **2.** In the Find What box, enter the value or word you want to locate.
- 3. Click the Options button and specify any desired options:
 - Within: Search just the current worksheet or the entire workbook.
 - Search: Select whether to search across the rows first, or down the columns first.
 - Look In: Select whether you want to search through the values or formula results, through the actual formulas, or look in the comments.



Select Formulas when you are looking for a formula that references a specific cell address.

- Match Case: Decide if you want your search to be case specific.
- Match Entire Cell Contents: Decide if you want your search results to list only the items that exactly match your search criteria.
- **4.** Click the Find Next button. Excel jumps to the first occurrence of the match (see Figure 8-12). If this is not the entry you are looking for, click the Find Next button again. Excel advises you if it does not locate the data you are searching for.
- *5.* Click the Close button when you have located the entry you want.



Figure 8-11: The Find and Replace dialog box

| C18 | 6 🔶 | & Merr Williets | | | | | | |
|------|-------------------------------|--|--------------------------------|--------|--------------|----|---|--|
| | A | B | 10 | 10 | 1 1 | E. | 6 | |
| 1 Te | ack Name | | Artist | Ratiog | Play Date | | | |
| 2 | 1 Bern Cou | Find and Replace | 2.6 | 6 | Sinday | | | |
| 31 | 9 Third Roc | | | 4 | Sunday | | | |
| | 34 That is Be | Frd Brgicce | | 3 | Sunday | | | |
| 5 4 | 45 Mony Mo | regulater Heri | (a) his Promid Set Foreight | 1 | Sinday | | | |
| 5 | E Wearny | Life white: | Therman Sec. (Long Sec | 2 | Sunday | | | |
| | 4 Louisiana | | | 7 | Monitaly | | | |
| | 13 Night Tox | Name In Children | | 4 | Monday | | | |
| 8. 7 | 21. Heard Do | There are an and a second seco | the cell contents | 3 | Monday | | | |
| | 28 Pull My C | Sewith By Room St | ora cas oprants | 6 | Monday | | | |
| | 36 High Cett | | Coppens < s | 6 | Monday | | | |
| | 47 Kinsin' Ca | | 000000.55 | | Monday | | | |
| | 6 Rain on t | | second processing and | 1 | Tripoday | | | |
| | 11 Give it to | | nd ## Entland Gloss | 3 | Tuesday | | | |
| | 17 Truck Dire | | | | Tuesday | | | |
| | 25 Tatepton | | Man Welson | 6 | Tiledbay: | | | |
| 7 | | low My Clerr Strength | Lorrie Morgan: | 1 | Turaday | | | |
| 8 | 37 Al Should | | Eves Presiling | | Tuesda | | | |
| | 42 Thank Yo | | Rick Nelson | 2 | Turoday | | | |
| 0 | 8 Stuck on | | Etres Presley | 7 | Wednesilling | | | |
| | 27 I Getta Vo | | Elves Fretley | | Wednesslay | | | |
| 12. | | ere Esu:When the World Stopped Turr | | 1. | Wednesday | | | |
| | 38 It's What | | Jobn Michael Montgomers | 4 | Wednesdag | | | |
| 14 | I Costoy L | Dia | Join Michael Mostgamery | 1 | Thursday | | | |
| 5 | | g to Talk About | Bennie Raitt | 6 | Thursday. | | | |
| | th Small Top | | jotin Colligie Metencarrio | 2 | Thursday | | | |
| | | 3 Whester) | Alabama | 1 | Transday | | | |
| | 33 Song of th | | Filabama | -2 | Thirsby | | | |
| | AC Bye Bye | | Rick Netton | 1 | Thursday | | | |
| | 44 Gypty Pr | | Flick Network | 6 | Thursday | | | |
| 11 | 5 One Night 10 Active Pre- | Strend ak a filmart | Bick Nation Bitly Ray Cyres | | Finday | | | |
| | | | | | | | | |

Figure 8-12: Excel finds data based on search specifications



Find All Data Occurrences

- 1. Choose Edit Find. In the Find What box, enter the value or word to locate.
- 2. Click the Options button and specify any desired options.
- **3.** Click the Find All button. The Find and Replace dialog box expands showing a list of each cell entry that contains your data (see Figure 8-13).
- 4. Click any entry. The specified cell is selected.
- 5. Click the Close button when you finish.

Locate Cells Based on Format

- 1. Choose Edit Find. Click the Options button. Verify the options you want to use.
- **2.** Click the Format button. The Find Format dialog box, shown in Figure 8-14, appears.
- **3.** Select any formatting options on which you want to search. A preview appears in the Preview box. Click OK.



Optionally, click the Choose Format from Cell button and select a cell already containing the formatting you want to search.

- **4.** In the Find What box, enter the value or word you want to locate. Leave this blank if you want to locate only cells with the specified formatting, regardless of the cell contents.
- *5.* Click the Find or the Find All button.
- 6. Click the Close button when finished.

| | Rei Nélson | | and the second | ege - 3+∆ | 1.34 | | | | | |
|---------------|--------------------------------------|--|---|---|---|---|--|---|---|---|
| CT A | · A NOCE PROSUM | | | 10 | | D | 1. 10 | - | . 6 | 11 2 |
| | | | Autor | Ac. | - | | | 1 1 | 6 | N I |
| Times | | | | | - | and a | | | | |
| - 10- | | | | | | - | | | | |
| - 24 | | | | | | 3 | | | | |
| | | | | a stor Physical Letter | | 100 | | | | |
| | | ath . | | STUR SHORDER | | 4 | | | | |
| | | PEN | ESPS EVENWY | | _ | 4 | | | | |
| | | | DUCK Recourt | | - | 0.0 | | | | |
| | | Find and Replace | | | | | 21641 | | | |
| | | | | | | | | | | |
| | Pull My Chain | Find Register | | | | | | | | |
| | | signed burn | | tol Increase | 100110 | P | | | | |
| | | riganita: Norm | soort. | 141 142 FORMULE | (Sec.] [| Jungal. | | | | |
| | | | | | | | | | | |
| | | The second | and and in the lot | | | | 10 | | | |
| | | WENC Det | | | | | D. | | | |
| 25 | | Search . No Divers. | Thethere and | sw old ograents | | | 0 | | | |
| | I Didn't Know My Own Strengt | Towned of Looks | 2 | | | | - Ifr | | | |
| 37 | All Shook Up | Look n. Formales | (Mr) | | - 1 | Options | .ce 1 | | | |
| 42 | Thunk You Lots | | | | | _ | | | | |
| 8 | Stuck on You | | | E-Fratak] [boil | March 1 | 1 10 | 1 | | | |
| 22 | I Getta Know | | | Tiene Libe | Contra 1 | | a day | | | |
| | | Book Chart | Name Ink | Value Drama | | | | | | |
| | | | | | | _ | | | | |
| 100 | | | | | | | | | | |
| - 7 | | Machigan Sheeti | | | | | | | | |
| 10 | | MucLis in thest | | | | | | | | |
| - 10 | | | | | | | | | | |
| | | | | | | | | | | |
| | | MUCULIN SWEE | acres (| work futtion | | | 19 | | | |
| 40 | Bye Bye Love | | | | | | 10 | | | |
| | | | | | | | - 62 | | | |
| 44 | Gypry Pilot | Y collection and | | | | | | | | |
| 44 5 10 | One High Sherd Ache Break (figen | 7 cellis) found | Univ Ray Cyru | _ | - | - | Fnday | | | |
| | Track | Track Nume 1 Barn Coarty 3 The Brock from the Size 3 The Size 4 Lancianty 5 The Size 4 Lancianty 5 The Size 46 Water ny Drop Actor Size 5 Hold Grag 30 Hold Grag 30 Hold Grag 31 Diath Size 32 Loss Hold Size 33 Loss Size 34 Size 35 Hold Size 36 Hold Size 37 Theoly You Lob 38 Hold Size 39 Hold New Size 30 Hold New Size 31 Dath New Size 32 Size Size 33 Size Size 34 Size Size 35 Size Size 36 Size Size 37 Size Size 38 Size Size 39 | Track Name 1 Bion Constrp. 3 Than Rick from the State 3 Regist Tran To Mergist 35 Regist Tran To Mergist 36 Regist Tran To Mergist 37 Regist Courses 38 Regist Courses 39 Regist Courses 31 Topp Course May 32 Libration Not District 33 Thank Rouge My Courses 34 Thank Rouge My Courses 35 Thank Rouge My Courses 36 Thank Rouge My Courses 37 Thank Rouge My Courses 38 Topp Course My Courses 39 Topp Course My Courses 31 Morean Were Stau What this V 32 Score Topp Top My Acad 33 Register Stau Wat Low 34 Score Topp Top My Acad 35 Stau Top Topp My Acad 36 <t< td=""><td>Track Name Artist 1 tiam Construction Alabana 3 Than Brock from the Spin Alabana 3 Than Brock from the Spin Alabana 4 Than Brock from the Spin Alabana 4 Marking Market Data Data Spin 4 Laurison Mark Data Spin 5 House Graph Fred 5 House Graph Fred 5 House Graph Fred 5 Tanger Data King Fred 6 Rain on the Scorecome Fred 7 Algoines Up Participies 7 Tanger Data Mark Low Linger 7 Tanger Data Linger Low Lin</td><td>Track Name Arriet 1 Barn County Abarna 3 Thart Bock from the Spin Abarna 4 Thart Bock from the Spin Abarna 4 Thart Bock from the Spin Abarna 4 Abarna Abarna 5 Abarna Abarna 6 Abarna Abarna 7 Abarna Abarna <</td><td>Track Name Arial J 1 Barn County Sum Sum (Difference) Sum (Difference)</td><td>Track Name Arial Particle 1 Barn County Sp. Alabras 5 1 Barn County Sp. Alabras 5 10 Barn County Sp. Alabras 5 11 Alage Tran To Merpiter 7 County Sp. 7 12 Alage Tran To Merpiter Fred Indeptor 7 13 Alage Trans To Sp. Fred Indeptor 7 14 Low Lines (County Sp. Fred Indeptor 7 15 Alabras to Line Fred Indeptor 7 16 Bara on the Scorecree Fred Indeptor 1 17 Task You Long Sp. Sp. Sp. Sp. 17 Task You Long Sp. Sp.</td><td>Track Name Ariat Rading Rading Rading Rading Starts 1 Barn County Space Space</td><td>Track Name Arisi Radius Radius Status 1 Barn County Spectromy Alabana 5 Status 5 10 Thank Dock Haught Alabana 5 Status 5 10 Thank Dock Haught Alabana 5 Status 5 11 Mark Dock Haught Alabana 5 Status 5 11 Mark Dock Haught Alabana 5 Status 5 12 Mark Dock Haught Alabana Status 7 Mark Dock 5 13 Mark Tan Rower Days Parking 2 Status 7 Mark Dock 7 Mark Dock 13 Mark Tan Rower Train and Ropics Frieght 7 Mark Dock 7 Mark Dock 7 13 Mark Tan Rower Train and Ropics Frieght 7 Mark Dock 7 Mark Dock 7 Mark Dock 7 7 7 Mark Dock 7 7 Mark Dock 7 7</td><td>Teals Rame Arbeit Rading Play Date 1 Barn Costing Alarana 5 Starting 1 Barn Costing Alarana 4 Starting 10 Bart Ton L Marcins Descriptions Starting 2 Starting 10 Hange Ton L Marcins Tone Starting 7 Microst Starting 10 Hange Ton L Marcins Tone Starting Tone Starting 1 10 Hange Tone Starting Tone Starting 1 Hange Tone Starting 1 10 Hange Tone Starting Tone Starting 1 Hange Tone Starting 1 10 Hange Tone Starting Index Starting 1 1 1 10 Hange Tone Starting</td></t<> | Track Name Artist 1 tiam Construction Alabana 3 Than Brock from the Spin Alabana 3 Than Brock from the Spin Alabana 4 Than Brock from the Spin Alabana 4 Marking Market Data Data Spin 4 Laurison Mark Data Spin 5 House Graph Fred 5 House Graph Fred 5 House Graph Fred 5 Tanger Data King Fred 6 Rain on the Scorecome Fred 7 Algoines Up Participies 7 Tanger Data Mark Low Linger 7 Tanger Data Linger Low Lin | Track Name Arriet 1 Barn County Abarna 3 Thart Bock from the Spin Abarna 4 Thart Bock from the Spin Abarna 4 Thart Bock from the Spin Abarna 4 Abarna Abarna 5 Abarna Abarna 6 Abarna Abarna 7 Abarna Abarna < | Track Name Arial J 1 Barn County Sum Sum (Difference) Sum (Difference) | Track Name Arial Particle 1 Barn County Sp. Alabras 5 1 Barn County Sp. Alabras 5 10 Barn County Sp. Alabras 5 11 Alage Tran To Merpiter 7 County Sp. 7 12 Alage Tran To Merpiter Fred Indeptor 7 13 Alage Trans To Sp. Fred Indeptor 7 14 Low Lines (County Sp. Fred Indeptor 7 15 Alabras to Line Fred Indeptor 7 16 Bara on the Scorecree Fred Indeptor 1 17 Task You Long Sp. Sp. Sp. Sp. 17 Task You Long Sp. Sp. | Track Name Ariat Rading Rading Rading Rading Starts 1 Barn County Space Space | Track Name Arisi Radius Radius Status 1 Barn County Spectromy Alabana 5 Status 5 10 Thank Dock Haught Alabana 5 Status 5 10 Thank Dock Haught Alabana 5 Status 5 11 Mark Dock Haught Alabana 5 Status 5 11 Mark Dock Haught Alabana 5 Status 5 12 Mark Dock Haught Alabana Status 7 Mark Dock 5 13 Mark Tan Rower Days Parking 2 Status 7 Mark Dock 7 Mark Dock 13 Mark Tan Rower Train and Ropics Frieght 7 Mark Dock 7 Mark Dock 7 13 Mark Tan Rower Train and Ropics Frieght 7 Mark Dock 7 Mark Dock 7 Mark Dock 7 7 7 Mark Dock 7 7 Mark Dock 7 7 | Teals Rame Arbeit Rading Play Date 1 Barn Costing Alarana 5 Starting 1 Barn Costing Alarana 4 Starting 10 Bart Ton L Marcins Descriptions Starting 2 Starting 10 Hange Ton L Marcins Tone Starting 7 Microst Starting 10 Hange Ton L Marcins Tone Starting Tone Starting 1 10 Hange Tone Starting Tone Starting 1 Hange Tone Starting 1 10 Hange Tone Starting Tone Starting 1 Hange Tone Starting 1 10 Hange Tone Starting Index Starting 1 1 1 10 Hange Tone Starting |

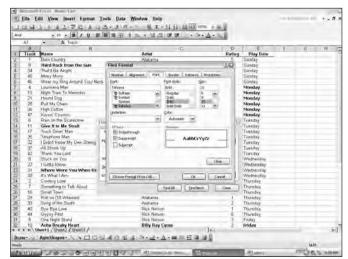


Figure 8-14: Find cells based on Format options

Figure 8-13: Find All results

Use the Replace Command

 Choose Edit ⇒ Replace (or press Ctrl+H). The Find and Replace dialog box opens with the Replace tab on top. (See Figure 8-15.)



If you want to replace only data in certain cells, rows, or columns, select the desired area before you open the Find and Replace dialog box.

2. In the Find What box, enter the data you want to locate.



Click the Options button to select additional search preferences. click the Format button and match the formatting you are searching for.

3. In the Replace With box, enter the data with which you want to replace the found data.



Like the Find data, you can specify the replacement data have specific formatting.

- **4.** Choose the Find Next button to locate the first found occasion or choose the Find All button to display a list of all occurrences.
- **5.** If you want to use the replacement data, click the Replace button. Excel performs the replacement and locates the next occurrence.
- **6.** If you want to replace all occurrences at the same time, choose the Replace All button. Excel displays an information box, shown in Figure 8-16, indicating the number of replacements made.
- 7. Click OK.



Figure 8-15: Exchange data with the Find and Replace feature

| | | | * 1 → 1 □ □ ■ ■ → → • △ • | 34 | | | | | |
|-------------|-----------|--|---|--------------|------------|---|---------|----------------|---|
| | | K Alan Jackton | | | | _ | _ | _ | _ |
| | Α. | 町 | 5. C | P | E | F | ß | 11 | 3 |
| 11- | Track | Name | Artist | Rating | Play Date | | | | |
| 8÷ | - 1 | 'Bern Country Third Rock from the Sun | Alabama Joa Diffe | | Sinday | | | | |
| 괾 | 34 | That's Be Airpht | Alan Jackton | - | Sunday | | | | |
| <u>99</u> | 46 | Many Mony | Tommy James 3.114 Shoredella | | Sinday | | | | |
| 3+ | 42 | Wear my Ring Around Your Neck | Ekis Prestes | | | | | | |
| 5 | 4 | Louisiana Man | Date Nelistr | | Sanday | | | | |
| 41- | 11 | | Cost of the second s | 1 | Monday | | | | |
| 影는 | 71 | Night Train Tr. Frind and Elliphian Heard Dog | | | Monday | | | | |
| ろ는 | 28 | Pull My Chan Find Finding | | - | Monday | | | | |
| | -10 | High Coffor | | | Monday | | | | |
| 븬 | - 47 | Kessin' Coose Pedialist Eves | W Nofemal Sti Paradia + | | Monday | | | | |
| 8 | 1 | | 11 | | Tuesday | | | | |
| H | 11 | Give it to Me | rosoft Eacht | 5 | Tunsday | | | | |
| 14 15 | 17 | Track Denver't Witzen, Street, W | | | Tuesday | | | | |
| 高 | 35 | Trade Little 1 | 1) E-of has completed to entrith and has made 7 a | vplicements. | Tuesday | | | | |
| 17 | 32 | Tatephone M Search: By Roses | ¥. | | Toreday | | | | |
| 1/ | - 34 | All Shunk Up Look in Formain w | | | Tuesday | | | | |
| 13 | 37 | Thank You Li | | | Turster | | | | |
| 20 | 8 | | | | Wednessing | | | | |
| 윩는 | 27 | Stuck on Yoy Beplace & Beplace | Find Al End Neut Own | | Wednesday | | | | |
| 24 | 31 | Where Were You When the World Stopped Te | mine Alan Jackash | | Wednesday | | | | |
| 12 12 12 14 | 38 | Ex What LAm | Auto Michael Montageners | 6 | Wednesday | | | | |
| 81 | | Covibay Love | Join Mchael Mortgomers | | Thursday | | | | |
| 35 | 7 | Something to Talk About | Bonie Ratt | - | Duration | | | | |
| 10 | 16 | Small Town | With Coupe Mellencarie | | Thursday | | | | |
| 40) 27 | 29 | Roll on (18 Wheeler) | Alabama | | Teander | | | | |
| <u>-</u> | 33 | Song of the South | - Alabama | 1 | Thurston | | | | |
| 28 | 40 | Bye Bye Love | Rick Netton | 1 | Thursday | | | | |
| 20 | 44 | Gypcy Pilot | Rick Netson | | Trunitar | | | | |
| 30 | | One Night Shend | Plick Netson | | Friday | | | | |
| 렸는 | 10 | Achy Break a fillent | Dify Ray Cyrve | | Fnday | | | | |
| ÷., | | wet1 / Spint2 / Spint3 /- | DRY RAY VYVI | . A. | 0.0004 | | | 3 | |
| | | | | - | | | | 10 | 1 |
| Dim | | AutoShapen · K > D C - 4 /2 (1 | 19.2.11.11.11.11.11.11.11.11.11.11.11.11.1 | | | | | | |
| leady | 6 | | | | | | | | |
| 10.0 | 24/1/2 40 | 1205 0 20 21114 | CONTRACTOR AND INCOME. | - | All Lotson | | III CHE | Section of the | - |

Figure 8-16: Making global replacements



Creating Charts with Excel

Whoever said a picture is worth a thousand words is most certainly referring to a chart. Let's face it . . . we like looking at pictures more than we like looking at sheets of data. Charts, sometimes referred to as *graphs*, provide an effective way to illustrate your worksheet data by making the relationship between numbers easier to see because it turns numbers into shapes, and then the shapes can be compared to each other.

If you've ever spent hours drawing a chart on graph paper, you'll really appreciate the ease with which you can create dozens of different chart styles using your Excel data and you don't really have to draw a thing! With just a few decisions on your part, and a few clicks of the mouse, you have a twoor three-dimensional illustration of your data.

Charts let you get across your thoughts with simplicity and strength and because different charts draw you to different conclusions, they prod you to ask different questions about what you are seeing. Whatever the idea you are trying to convey, charts make it easier.

In this chapter, discover how to

- ➡ Quickly and easily create a chart
- Modify a chart whether in appearance or content
- Work with a 3-dimensional chart
- Design and create an organization chart

Chapter

Get ready to. . .

| ···→ Create a Basic Chart | 86 |
|----------------------------------|----|
| ➡ Work with the Chart Wizard | 88 |
| ➡ Change the Chart Type | 90 |
| | 91 |
| ⊶ Customize the Chart Legend | 91 |
| ➡ Modify Chart Attributes | 92 |
| ➡ Add Graphic Images to a Series | 92 |
| ➡ Change a Chart Location | 93 |
| ⊶ Add a Data Table | 93 |
| ➡ Enhance a 3-D Chart | 94 |
| ⊶ Add or Delete Data | 95 |
| ➡ Format the Value Axis | 95 |
| ··→ Create an Organization Chart | 96 |

Create a Basic Chart

- 1. Select the data (sequential or nonsequential) you want to plot in the chart. See Figure 9-1 for an example of sequential data selected for a chart.
- **2.** Press the F11 key. Excel immediately adds a new sheet called Chart1 to your workbook with the data plotted into a column chart. Each subsequent chart page is numbered sequentially such as Chart2, Chart3, and so forth. Looking at Figure 9-2, you can see the various elements that make up a chart:



Some newer keyboards use a different function for the F11 key. If your F11 key does not produce a chart, use the Excel Chart Wizard as explained in the next section.



Throughout this chapter you find out how to edit the look and style of a chart, including creating a chart using the Excel Chart Wizard.

- **Title:** A descriptive name for the overall chart. By default, titles are not added in a basic chart, but you can add them later manually or by using the Chart Wizard.
- X or Category axis: Column or row headings from your selected data, which Excel uses for Category axis names. In a column chart, the categories display along the bottom. In other charts (such as a bar chart), the category axis displays along the left side.
- Category label: A descriptive name for the Category axis. By default, a category label is not added in a basic chart, but you can add one later manually or with the Chart Wizard.

| G Microsoft Eccol - s | | | | | | | | | | 23 |
|-----------------------|--|--------------|-----------|------------|------------|-------|---|------|-------------------|-----|
| 1393.09 | 1170 | rmar Tools D | | E-11(1) | 1113 10m + | | | ~ 10 | manual fire disso | 0 |
| A4 👻 | A Salespere | iðn. | | | | | | | | |
| | D | | D | E . | | 6 | 0 | A | × | L |
| a.) | ABC | PRODUCT | ION COM | PANY | | | | | | |
| 2 | UNITS | SALES BY | SALESP | ERSON | | | | | | |
| Salesperson | | February | March | TOTAL | AVERAGE | RATIO | | | | |
| s Andraw | 147 | 125 | 172 | +45 | 148 | 27% | | | | |
| Spencer | 92 | 107 | 106 | 305 | 102 | 18% | | | | |
| / Alex Daniel | 210 | 91 164 | 243 | 296 617 | 206 | 18% | | | | |
| TOTALS | 554 | -488 | 621 | 1,663 | 200 | 100% | | | | |
| d | 001 | 100 | | 1000 | | 14410 | | | | |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 14 | | | | | | - | | | | |
| 5 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| a l | | | | | | - | | | | |
| 12 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 8 | | | | | | - | | | | |
| | 1. | 10 | | | 100 | | | | | - |
| + + +/ Some / Of | | | | | 145 | | | | _ | - 3 |
| Draw - AutoSha | 1 6 6 198 | 00840 | 10 31 25. | 2.2.2 | # # # # # | | | | | |

Figure 9-1: Select data for a chart

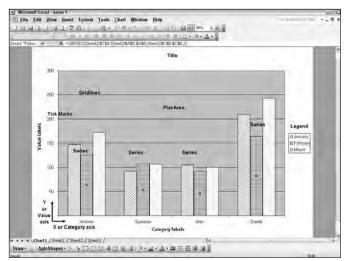


Figure 9-2: Viewing chart basics

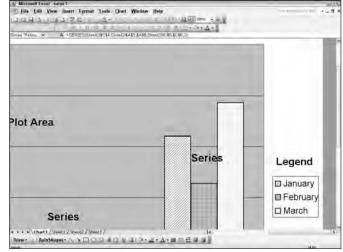
87

- Y or Value axis: A scale representing the zero or the lowest and highest numbers in the plotted data. The Value axis is usually located on the left side on a column chart or on the bottom on a bar chart.
- Value label: A descriptive name for the values. By default, a value label is not added in a basic chart, but you can add one later manually or by using the Chart Wizard.
- Legend: The box, usually located on the right, identifies the patterns or colors that are assigned to the chart data series. Notice in Figure 9-3 how the legend explains that the striped series represents January, the checked series is for February, and the solid color series is for March.
- Tick marks: The small extension of lines that appear outside of the gray area and represent divisions of the value or category axis.
- **Gridlines:** These lines extend from the tick marks across the chart area, which allows you to easily view and evaluate data.
- Series: Excel uses the worksheet cell values to generate the series. Each element, called *data markers*, represents a single worksheet cell value and related data markers make up a data series and have the same pattern or color. In Figure 9-4, you can see the comparison of the data values to the y-axis and the series values.
- **Plot area:** The gray background that represents the entire plotted chart area.



To delete this chart, right-click the Chart tab and choose Delete. When Excel asks for a confirmation, click Delete again.

Use any of the drawing tools on the Drawing toolbar to annotate your chart such as adding arrows, circles, or text boxes. See Chapter 5 for more info.



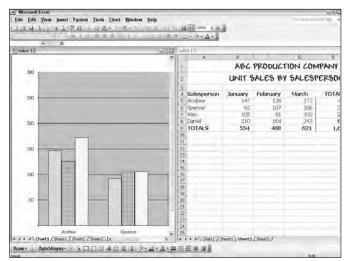


Figure 9-4: Data displayed in a data series

Figure 9-3: A chart legend

Work with the Chart Wizard

- 1. Select the data you want to plot in the chart. If you are selecting values such as monthly figures, you don't want to include totals in your chart.
- 2. Choose Insert Chart or click the Chart Wizard button on the Standard toolbar. The first screen of the Chart Wizard appears. (See Figure 9-5.)
- **3.** Select the chart type you want to use (click a chart type to see a sample and an explanation of the chart):
 - Column: Column charts compare values to categories using a series of vertical columns to illustrate the series.
 - **Bar:** Bar charts, like column charts, compare values to categories, but use a series of horizontal bars to illustrate the series.
 - Line: Line charts are similar to bar charts but use dots to represent the data points and lines to connect the data points.
 - **Pie:** This chart compares parts to a whole. Usually a pie chart has only one data series (see Figure 9-6).
 - Area: Area charts display the trend of each value, usually over a specified period of time.
 - X-Y Scatter: These charts include two value axes, showing one set of numerical data along the x-axis and another along the y-axis.
 - Surface: Shows trends in values in a continuous curve.
 - **Doughnut:** Displays data similarly to a pie chart; it compares parts to a whole, but contains multiple series.
 - **Radar**: Displays changes in values relative to a center point by comparing the cumulative values of multiple data series.

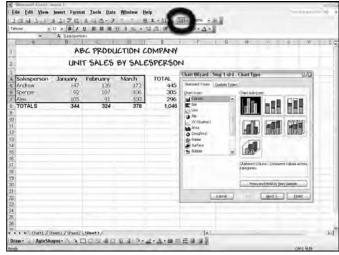


Figure 9-5: Screen 1 of the Chart Wizard



Figure 9-6: Create a pie chart from this data



- **Stock**: Stock charts (see Figure 9-7) illustrate the fluctuation of stock prices. In a stock chart, the data order is very important and usually the row headings are High, Low, and Close; or Open, High, Low, and Close.
- **Bubble:** These charts are similar to scatter charts, but compare three sets of values by displaying a series of circles.
- Cylinder, Cone, and Pyramid: These three charts create a column or bar chart using 3-dimensional shapes.
- **4.** Choose a chart subtype. Depending on the chart type, some chart subtypes show the data series next to each other, others show the data stacked on top of each other. Additionally, some charts are 2-dimensional and others are 3-dimensional.



If you are not sure which chart subtype is best for your data, click the Press and Hold to View Sample button to see your selected data in any chart style and subtype.

- **5.** Click Next. Step 2 of Chart Wizard (shown in Figure 9-8) appears.
- *6.* Select whether you want Excel to plot the data series from your columns of selected data or from the rows of selected data.



To select different data for your chart, either type the correct cell address range in the Data Range text box, or click the spreadsheet icon at the end of the Data Range text box, highlight the desired data, and press Enter to return to the Chart Wizard.

7. Click Next. Step 3 of the Chart Wizard appears. The options you see depend on the chart type you selected.

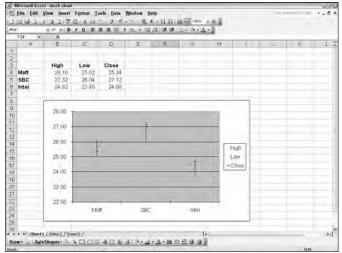


Figure 9-7: A stock chart and its data

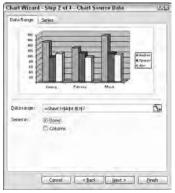


Figure 9-8: Screen 2 of the Chart Wizard

- **8.** Choose which options you want to include with your chart (Figure 9-9 shows column chart options). The options you see depend on the chart type you selected:
 - **Titles:** Adds descriptive information to the chart and optionally to the category and value axes.
 - Axes: Displays or hides the primary axes of your chart.
 - Gridlines: Displays or hides chart gridlines.
 - Legend: Displays the chart legend and determines legend placement.
 - Data Labels: Adds category and value labels.
 - **Data Table:** Displays data values. See the "Add a Data Table" section.
- 9. Click Next. The final screen of the Chart Wizard appears.
- *10.* Select whether you want Excel to place the chart on its own worksheet or whether you want it placed on the worksheet where your data resides.
- 11. Click the Finish button to create your chart.



90

If you opt to place the chart on the existing worksheet, Excel treats it as a graphic image. Chapter 5 covers how to resize, move, or delete the chart.

Change the Chart Type

- 1. If the chart is on a regular worksheet, click the chart to select it. If it is on its own sheet, display the sheet. The menu changes to reflect the chart options.
- **2.** Choose Chart Chart Type. Select the chart type and subtype you want. (See Figure 9-10.)
- 3. Click OK. Excel modifies the existing chart.



Figure 9-9: Screen 3 of the Chart Wizard

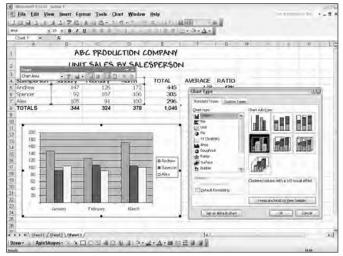


Figure 9-10: Select a different chart type or subtype

Include Titles and Labels

- 1. If you want to add a title to your chart, choose Chart ↔ Chart Options. The Chart Options dialog box opens, with the Titles tab showing (see Figure 9-11).
- 2. Enter a title in the Chart Title box.
- **3.** Enter a name for the Category axis and the Value axis. Note that 3-dimensional charts may consider a *z*-axis for the value axis.
- 4. Click OK.

Customize the Chart Legend

- 1. To modify the Legend box (but not the series), select the Legend box.
- 2. Choose Format Selected Legend. The Format Legend dialog box appears.
- 3. Click the Patterns tab and select the following options:
 - Color or fill effects for the background of the legend.
 - A border style that goes around the legend.
- **4.** Click the Font tab and select a font, size, style, and color for the legend text. See Figure 9-12.
- 5. Click the Placement tab and select the legend location.



Optionally, in the chart itself, you can drag the legend to any desired location.

6. Click OK. Excel makes the legend changes.

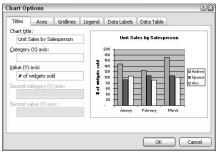
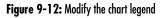


Figure 9-11: Add labels and titles to your chart

| Patterns Font Placeme Font: | Font style: | Size: | | | | | |
|---|--|------------------------|-----|--|--|--|--|
| Arial | Regular | 10 | | | | | |
| Tr Angelica Tr Angelina Antique Olive Tr Arial | Regular Italic Bold Bold Italic | 8 ^ 9 10 11 ¥ | | | | | |
| Underline: | <u>C</u> olor: | Background: | | | | | |
| None 🗸 | Automatic 🛩 | Automatic | ~ | | | | |
| Superscript Subscript Subscript | AaBbCcYyZz | | | | | | |
| ✓ Auto scale This is a TrueType font. The sail | me font will be used or | n both your printer | and | | | | |



Modify Chart Attributes

- 1. Double-click the chart element you want to modify. For example, if you want to change the style of the gridlines, double-click a gridline. If you want to apply different colors or patterns to a series, double-click any part that represents the series you want to change. The appropriate Format dialog box appears (Figure 9-13 shows the Format Data Series dialog box).
- 2. Make any desired changes in the Format dialog box.



Click the Fill Effects button in the Format Data Series dialog box to add texture, gradients, or patterns to the series.

3. Click OK.

Add Graphic Images to a Series

- 1. Double-click the series you want to add an image to. The Format Data Series dialog box appears.
- **2.** Click the Fill Effects button on the Patterns tab. The Fill Effects dialog box opens.
- *3.* Click the Select Picture button on the Picture tab. The Select Picture dialog box opens.
- 4. Locate and select the picture you want to use.
- *5.* Click the Insert button.
- *6.* In the From the Format section of the Fill Effects dialog box, choose Stack.
- **7.** Click OK twice. Figure 9-14 illustrates a bar chart where I changed one bar series to a graphic image.

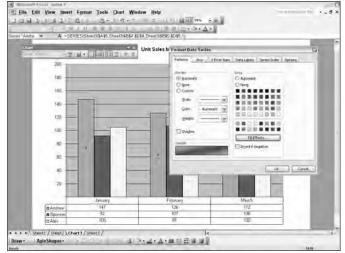


Figure 9-13: Double-click a chart element to modify it

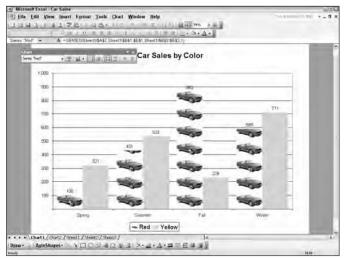


Figure 9-14: Liven up charts with graphic images

93

Change a Chart Location

- 1. Choose Chart Chart Location. The Chart Location dialog box, shown in Figure 9-15, appears.
- 2. Select a location.
- **3.** Click OK. Your chart is moved to the location you've specified.

Add a Data Table

1. To display a chart data table, click the sheet containing the chart.



You can add data tables to charts included with a regular worksheet, but it isn't a common practice because the worksheet itself already displays the data.



Data tables display the chart values in a grid beneath the chart. You'll find them very helpful if a reader needs to see exact values along with a graphical display, such as when using a 3-D chart.

- 2. Choose Chart Chart Options.
- **3.** Select the Data Table tab.



Data tables are not available for pie, scatter, bubble, radar, or surface chart types.

4. Select the Show Data Table option.



Be sure to check the Show Legend Keys box if you want the data table to display each legend next to the series label in the data table.

5. Click OK. A data table, as shown in Figure 9-16, displays at the bottom of the chart showing the actual values.

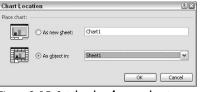


Figure 9-15: Switch a chart from one location to the other

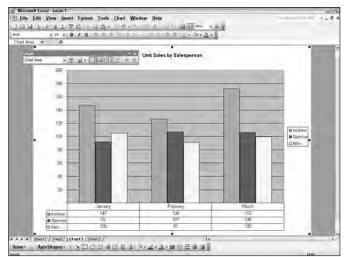


Figure 9-16: Display the data table

Enhance a 3-D Chart

- 1. Using the Chart Wizard, create a 3-dimensional chart. (See the "Work with the Chart Wizard" section.)
- **2.** If the chart is on a regular worksheet, click the chart to select it. If it is on its own sheet, display the sheet.



Just in case you don't like your changes, make sure to save your worksheet, which also saves your chart, before modifying chart attributes.

- **3.** Choose Chart 3-D View. The 3-D View dialog box, shown in Figure 9-17, appears. The options you see depend on the chart type.
- **4.** Click the up or down arrows to modify the up/down elevation angle of the chart. You can optionally type the elevation angle (between 10 and 80) in the Elevation text box.



Click the Apply button to see the changes before you close the 3-D View box.

- **5.** Click the left or right rotation arrows or enter the degree of left/right rotation (between 0 and 360) you want for the chart in the Rotation box.
- **6.** Change the thickness of the bars or height of pie slices by entering a value (between 5 and 500) in the Height box.
- **7.** Click OK. The chart appears on-screen, rotated to the angles you selected. Figure 9-18 shows a 3-D pie chart before and after changing the elevation, rotation, and depth. The pie also has a piece pulled out for emphasis.

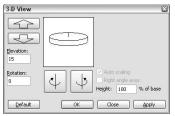


Figure 9-17: Rotate a 3-dimensional chart

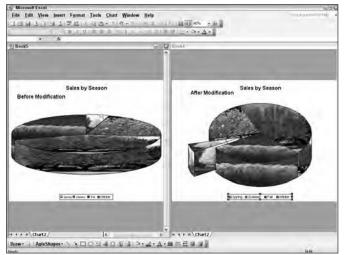


Figure 9-18: Enhance a pie chart



Add or Delete Data

- 1. To add or delete a series to a chart, choose Chart-Source Data. The Source Data dialog box opens.
- **2.** Alter the table data as you need:
 - Add a series: Click the Data Range tab, which displays the current chart data selected in the worksheet (see Figure 9-19). Use the mouse to select the new complete data range, including both the current data and the new data.
 - **Remove a series:** Click the Series tab. In the Series section, select the series name you want to remove and click the Remove button.
- 3. Click OK. The Source Data dialog box closes.

Format the Value Axis

- **1.** Double-click the value axis, which displays the Format Axis dialog box.
- 2. Choose the options you want to change:
 - Patterns: Change the line styles used by the value axis.
 - Scale: Change a range by entering the maximum and minimum values, as shown in Figure 9-20.
 - Font: Change the value font name, size, and appearance.
 - Number: Format the range as currency, including decimal points and dollar signs.
 - Alignment: Change the value orientation. This option is rarely used.
- 3. Click OK when you're done.

| - | | N. J. V. S. | 11- | 1 | 1110 | | |
|-------|--------|-------------|-------|------------|--------|------------------------------|-------------|
| A | • A +S | ERE5(Sheel1 | D D | SEST SEST. | | | м |
| | Spring | Summer | Fatl | Winter | TOTALS | | |
| 2 | 100 | 431 | 648 | 500 711 | 1,768 | Source Data | 10 |
| Row . | 200 | 210 | 229 | 350 | 1,794 | Data Range Seren | <u>- 10</u> |
| TALS | 621 | 1,174 | 1,177 | 1,850 | 4 522 | | |
| | | | | | | Car Sales by Color | |
| | | | | | | 100 p | |
| | | | | | | B10 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | Iping Salami PA states | |
| | | | | | | # RotYekniv # Diver | |
| | | | | | | | |
| | | | | | | Dikarange - Invertigast 1924 | i |
| | | | | | | Senso W (0) Esset | |
| | | | | | | Clobert | |
| | | | | | | a ment | |
| | | | | | | | |
| | | | | | | - | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | DE Dece | - 12 |
| | | | | | | Last and Last | - |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Figure 9-19: Add additional data values to the chart

| Patterns 3 30ml Park Number Algement 1 Web (17) su State Auto Tel Megunum: 0 Megunum: 0008 @ Megunum: 200 @ Megunum: 200 @ Category(k) anti- growm at 0 0 | ormal Axis | |
|--|--------------------|-----------------------|
| Auto Autonum: D Magnum: DOU Magnum: DOU Magnum: 100 Magnum: 200 Category (0 ans | Patterns Scale | Fore Number Alignment |
| Miginum: II Magnoum: 2000 Miginum: 2000 Miginum: 2000 Miginum: 2000 Miginum: 2000 Category (c) ands 2000 | Mule (Y) and scale | |
| Magnum BBB Magnum Mos unit Mos unit D Mos unit D Category (C) ans | auto | |
| Magar (Jul) 106 Magar (Jul) 20 Magar (Jul) 20 Category (2) ans | Minimum: | n |
| ☑ Mpor unit: 20 ☑ Category (X) ans | Magnum: | 800 |
| [☑] Category (X) axes | Magor sents | 106 |
| E Category (x) axes | Moor unt: | 20 |
| Çrisses ali D | | |
| | | |
| Display units: Norm M | HISPANY LINES: | Nore M |
| Lingerithmic scale Johns in promise octor Category (/) usis crosses at maximum value | Locarithmic sca | |

Figure 9-20: Change the value scale

Create an Organization Chart

- 1. Choose Insert Picture Organizational Chart. A sample organization chart like the one in Figure 9-21 appears on the current worksheet along with an Organization Chart toolbar.
- **2.** Click a box and type a name or position. Press Enter to add a second line if desired and apply any formatting.



Double-click any box to change the individual box background color.

- **3.** Using the Organization Chart toolbar, make other chart layout changes as follows (Figure 9-22 shows a modified org chart):
 - Add additional subordinates, coworkers, or assistant: Click the box to which you want to add a subordinate, coworker, or assistant. Select the appropriate choice from the Insert Shape drop-down list. A new box appears under or next to the previously selected box.
 - Change the overall layout: Select a different layout from the Layout drop-down list.
 - Change the connecting line styles: Choose All Connecting Lines from the Select drop-down list. Double-click any line and change the style in the Format AutoShape box. Click OK.



Other charts not based on Excel values (called *diagrams*) include Cycle, Radial, Pyramid, Venn, and Target. Choose Insert=>Diagram, select the type of diagram you want, and then click OK. Use the Diagram toolbar to annotate or edit the diagram.

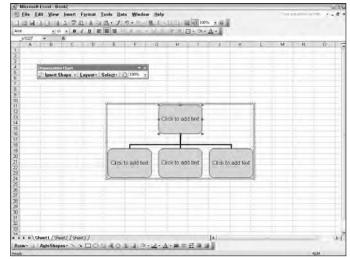


Figure 9-21: Create an org chart with Excel

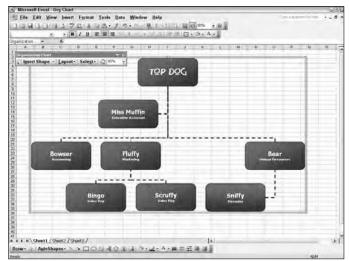


Figure 9-22: A modified organization chart

Printing Workbooks

hen you finish compiling your worksheet, you'll probably want to print a hard copy or e-mail a copy to someone else. This chapter shows you a number of Excel tools you can use to improve your document layout, including headers, footers, page orientation, and margins.

Also, before you print or give your Excel file to someone else, you should check it for spelling errors because typos can stand out screaming "I can't spell." Excel includes a built-in dictionary you can use to check your workbooks for misspellings; however, it can't read your mind, so if you type *too* instead of *two*, Excel probably won't indicate that as an error. But, combine the spell check with proofreading on your part, and you'll find a very helpful tool.

When printing, Excel assumes you want to print the entire worksheet area unless you specify otherwise. You discover how to specify exactly what you want to print. This chapter also includes these topics:

- Working with page breaks
- Adjusting the paper size
- Making your worksheet fit better on a page for those times when you want to get that last few rows or columns on a single page
- Printing gridlines or row and column headings on the page as well as other print options that you might want to select when printing your worksheet or chart



Get ready to. . .

| Spell Check | 98 |
|---|-----|
| → Preview Before Printing | 99 |
| ➡ Add a Manual Page Break | 100 |
| ➡ Set a Specific Area to Print | 100 |
| \longrightarrow Adjust the Paper Size and Orientation | 101 |
| \longrightarrow Make Worksheets Fit Better on a Page | 101 |
| ➡ Set Page Margins | 102 |
| ➡ Add a Standard Header or Footer | 102 |
| ➡ Create a Custom Header or Footer | 103 |
| ➡ Specify Repeating Rows and Columns | 104 |
| → Print Gridlines and Row and | |
| Column Headings | 104 |
| | 105 |
| ··→ E-Mail a Workbook | 105 |

Spell Check

 Choose Tools
 ⇒Spelling or click the Spelling icon on the Standard toolbar. The Spelling dialog box opens and Excel highlights the cell with the first potential misspelling along with suggested changes (as shown in Figure 10-1).



Optionally, press F7 to start the spell check.

Spell check reviews all cell values, comments, embedded charts, text boxes, buttons, and headers and footers, but it does not check protected worksheets, formulas, or text that results from a formula.

- 2. Select one of the following options:
 - Change or Change All: Choose one of the suggestions; then click Change to change just this incident of the spelling mistake or Change All if you think you could have made the mistake more than once.
 - AutoCorrect: Have Excel, in future workbooks, automatically correct the mistake with the selected replacement.
 - **Ignore Once:** Click this button if you don't want to change the highlighted instance of the spelling.
 - **Ignore All:** Click this button if you don't want to change any instances of the spelling.
 - Add to Dictionary: Add a word to Excel's built-in dictionary so that Excel won't flag it as a potential error in the future.
- **3.** After you select an option, Excel proceeds to the next error, and when all potential mistakes are identified, click OK (as shown in Figure 10-2).

| | 413 🛥 🌾 Sepris | | and the second se | _ | | - | | - | à+ <u>∆</u> + | | | | |
|----------|--|------|---|-------|-----------|---------------|------------------|-----|---------------|--|---|----|---|
| | A | - | в | | C | | D | | E | F | G | H. | 1 |
| 1 | | | ABC | C | orporo | tic | m | | | | | | |
| 2 | | 1 | Spalling: Er | glisi | h (U.S.) | | - | - | | 1.27 | | | |
| 3 | | | her in Definition | 1 | | | | | | | | | |
| 4 | | 10 | Daples | | | | | | 11.10 | Nore Lince | | | |
| | and the second sec | 14 | | | | | | | 100 | court Al | | | |
| 5 | Revenues | 1.1 | | | | | | | Long | | | | |
| 6 | Ewit | \$ | Supportation | | | | | | <u>. Ant</u> | to tistionary | | | |
| 7 | West | 3 | Gaolie | | _ | _ | | | | gene] | | | |
| 8 | North | 2 | Ducy And | _ | | _ | | _ | - | Concernant of the local division of the loca | | | |
| 9 | South | 4 | Supply | _ | | _ | | _ | - | heige 4 | | | |
| 10 | Total Revenues | ş | SHEPH | | | | | | 1 1 a 4 | bestick | | | |
| 11 | and water and | | Departery large | | | | | | - | Contra 1 | | | |
| 12 | Expenses | -14 | Departe y revo | NQ8 | Emploited | 427 | | | 3 | | | | |
| 13 | Supplie | -13 | | | 11.00 | in the second | | | | Cather | | | |
| 14 15 | Wages Office Expanse | - 3 | 981 | | 1.127 | | | - | 3,404 | | | | |
| 16 | Likitiwis | - 3 | 1.124 | 3 | 1,12/ | 5 | 1,296 | 12 | 3,494 | 0.75 | | | |
| 17 | Auto Expense | 12 | 1,795 | 1 | 1,291 | - | 2,373 | ÷, | 5,900 | 1.2% | | | |
| 18 | Other | 1.2 | 1,420 | ŝ. | 1,783 | 12 | 1,555 | 62 | 4 758 | 1.2% | | | |
| 19 | Total Expenses | | 46.327 | + | 53.423 | + | 60,940 | - 1 | 161 691 | 32.2% | | | |
| | roter Expenses | - 15 | 40,321 | 2 | 30,44.5 | 12 | 00,940 | i. | 100.001 | 76.6.10 | | | |
| | Constraint and | | | - | | - | And a local data | | 338 176 | 67.8% | | | |
| 20 | Net Profitt | 5 | 112,850 | | 115.435 | 12 | 109.893 | 14 | | | | | |

Figure 10-1: Use the spell check to correct errors

| | Sans Mi + H + B | | R R R | H. | \$ 16 1 5 | 10 | | | ≫• <u></u> 4• | | | | | |
|----|-----------------|------|---------|----|-----------|-------|-----------------|-------|-----------------|--------|---|----|----|-----|
| | A | 10.1 | в | | C | | D | - | E | F | G | H. | 10 | 1 3 |
| 1 | 1 | | ABC | c | orpora | tio | m | | | | | | | |
| 2 | | | Incor | ne | State | me | nt | | | | | | | |
| 3 | - | | | | | | | | | | | | | |
| 4 | | | Tanuary | | February | | March | | Tetals | Fatio | | | | |
| 5 | Revenues | | | | | | | | | | | | | |
| 6 | Ewit | 5 | 42.975 | \$ | 49,421 | 1 | 56,834 | Ŧ | 149.231 | 21.15 | | | | |
| 7 | West | 5 | 37,485 | \$ | 43,108 | \$ | 49,574 | 5 | 130,167 | 24.1% | | | | |
| 8 | North | 5 | 28,994 | \$ | Microsof | - | | | | 20.2% | | | | |
| 9 | South | 5 | 49,722 | 5 | | - | | | | 23.8% | | | | |
| 10 | Total Revenues | 5 | 158,477 | 5 | The start | 19.01 | ed & completer) | 10.10 | e news a chemb: | 100,0% | | | | |
| 11 | | | | | 100 | | OK. | J. | | | | | | |
| 12 | Expenses | | | | | - | | | 11.11.1 | | | | | |
| 13 | Supplies | 8 | 32,568 | \$ | 37,452 | 18 | 43.070 | 译 | 113,090 | 22.TT | | | | |
| 14 | Wages | - 5 | 8,440 | 6 | 9,706 | - \$ | 11,162 | -5 | 29,308 | 5.15 | | | | |
| 15 | Office Expense | 4 | 961 | 4 | 1,127 | - | 1,296 | \$ | 3,404 | 6.Tu | | | | |
| 16 | URINIMAS | \$ | 1,124 | \$ | 1,291 | \$ | 1,485 | 1 | 3,900 | 0.8% | | | | |
| 17 | Auto Expense | | 1,795 | .6 | 1,053 | .1 | 2,373 | \$ | 6,230 | 1.2% | | | | |
| 18 | Other | 1.5 | 1,420 | 1 | 1,783 | 1 | 1,555 | ş | 4,758 | 1.0% | | | | |
| 19 | Total Expenses | 8 | 46,327 | 4 | 53,423 | . 8 | 60,940 | - 8 | 163,691 | 72.2% | | | | |
| 20 | | _ | | | | | | | | | | | | |
| 21 | Net Profit | \$ | 112,650 | 12 | 115,435 | 1 | 109,893 | 15 | 338,176 | 67.8% | | | | |

Figure 10-2: The completed spell check message box

98

Preview Before Printing

- 1. Choose File Print Preview or click the Print Preview icon on the Standard toolbar.
- **2.** From the Print Preview screen (shown in Figure 10-3), select from the following options:



I cover many of the Print Preview options in greater detail later in this chapter.

- If there are multiple pages, click the Next or Previous buttons to view additional pages.
- Click the Zoom button to enlarge the view. Click a second time to reduce the view.
- Click the Print button to display the Print dialog box.
- Click the Setup button to display the Page Setup dialog box.
- Click the Margins button to display the page margins; then drag any margin line to manually set margin sizes. Click the Margins button again to turn off the margin lines.
- Click the Page Break Preview button; then click OK to display the worksheet in Page Break Preview mode. You can manually adjust where the page breaks occur by dragging any blue page break line (see Figure 10-4). You can also resize the print area and edit the worksheet. Return to Normal view from Page Break Preview by choosing Viewt>Normal.
- 3. Click the Close button to return to Normal view.

| Next (Pax. | Statut Maga Pageas Provide Coat | - |
|------------|---------------------------------|---|
| | FURC CLICCOC | |

Figure 10-3: Print Preview options

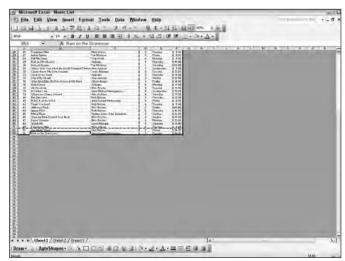


Figure 10-4: Adjusting page breaks

Add a Manual Page Break

- 1. Click a cell in the row where you want the new page to begin.
- 2. Choose Insert Page Break. Dotted page break lines similar to the ones in Figure 10-5 appear.



To remove the manual page break, click a cell in the row just below the page break and choose Insert=>Remove Page Break.

Optionally, adjust page breaks through Page Break Preview mode. Choose View=>Page Break Preview.

Set a Specific Area to Print

1. Highlight the area you want to print. See Figure 10-6.



Unless you specify a print area, Excel prints the entire worksheet.

2. Choose File⇔Print Area⇔Set Print Area. Dotted lines appear around the print area. When you print the worksheet, only the area within the boundaries print. See the "Print Worksheets or Charts" section, later in this chapter to print.



To reset Excel to print the entire worksheet, choose File⇔Print Area⊏>Clear Print Area.

Optionally, highlight the area you want to print and from the Print dialog box, choose Selection in the Print What section.

| 44 | | - 10 - B / U B B H + \$ % | ・ 山口 東東 二・コ・ム | - | | | | |
|-------|-------|--|---------------------------|---------|-----------------------|-----------|----|---|
| - | A28 | • A 26 | 15 | 1.0 | 1 2 | | Æ | |
| 1 | | | IC COLLECTION | 1.0 | 1 6 | E. | 15 | н |
| | Track | Name | Artist | | - | | | |
| 61- | TSACK | Barn Cusetty | Artist Avitama | Rating | Play Date Strettey | 5 12:00 | | |
| 24 | | Contrary Love | John Michael Mottanners | 3 | Thurden | \$ 12.00 | | |
| 24 | | It Doesn't Get Any Countries Than True | Tent McGraw | | Salurday | 5 800 | | |
| 24 | | | Rick Network | 1 | | | | |
| 2.1 | 12.1 | Louissance Man | | | Monday | \$ 11.00 | | |
| | 18. | One Hight Stand Rain on the Scarecrow | Hick Nation | - 1 - | Finday | \$ 14.00 | | |
| 5.5 | | | upter Courger Metenciario | | Toesdag | | | |
| ₿. | - 5 | Semithing to Talk About | Utorie Fatt | | Throber | \$ 13.00 | | |
| 9 | | Stuck on You | Elws Presky | - 1 - 1 | Wednesday | \$ 15.00 | | |
| 11 | 9 | Third Rock from the Sun | /0e D/%e | 1 4 | Sanday | \$ 20.00 | | |
| 2 | | Achy-Breaky Heart | Billy Ray Cysic | 1 | Friday | \$ 10.00 | | |
| | | Giver it to Mar Straft | Tim McBrew | 3 | Tuesday: | 1 20.00 | | |
| 4 | 17 | I Warna Talk About Me | Toby Hedb | 2 | (Saturday | \$ 15.00 | | |
| 10 | 1.5 | Night Tran To Memphis | Rick Netpon | 1 | Monday | 1 13 00 | | |
| 8 | 14 | Sold, The Grundy County Auction Indianet | John Muhael Morriganing | 3 | Saturday | \$ 12.00 | | |
| Z | 15 | Except for Miniley | Lome Morgan | 5 | Safurday | \$ 8.00 | | |
| ŝ. | 16 | Small fown | John Coope Melanciene | 1 | Thurbday | \$ 11.00 | | |
| 9 8 1 | 17 | Truck Driver' Man | Rick Nelvon | 5 | Tuesday | \$ 10.00 | | |
| 9 | 10 | Two of a Kind, Womm on a Full Rouse | Garth Brooks | 1 | Saturday | \$ 11.00 | | |
| 1 | 19 | Down on the Farm | Tan McGnew | 4 | Enday | \$ 15.00 | | |
| 3 | 20 | Every Time You Say Gontaye | Autom Provid | 5 | Situriay | 1 9.00 | | |
| 10 | 21 | Huand Dag | Elina Prasney | . 1 | Meeday | \$ 12.00 | | |
| 4 | 22 | I Gotta Mnow | Elec Preting | 1 4 | Wednesday | \$ 14.00 | | |
| 10.47 | .23 | Pickup Man | Jan Diffe | | Friday | \$ 15.00 | | |
| | 24 | Filands in Low Places | Gath Broaks | 1 4 | Saturday. | \$ 16.00 | | |
| 7 | 35 | Wetch Me | Lome Motgan | 1 | Silunday | F 1200 | | |
| ΗE | | Telephone Man | Mim Wilson | H H | Tuntiday | 1 100 | - | |
| 91 | 27 | Indian Didlari | Tan McBraw. | 5 | Franky | \$ 9.00 | | |
| 10 | 28 | Pul My Chain | Teby Keth | 6 | Minilay | \$ 0.00 | | |
| 11 | | Roll on (12 Wheeler) | Alabierres | 1 | TRunder | 8 10.00 | | |
| n a | 36 | Refred Dreams | Tim McGraw | 1 | Saturday | \$.30 00 | | |
| | 31 | Where Were Tou When the World Stopped Toming | | 7 | Wednesday | F 100 | | |

Figure 10-5: Insert a manual page break

| | Sans MI + H + B | | | ने । | \$ 16 1.5 | 4.4 | 19.90 | | >+ <u>A</u> +] | | | | |
|----------|---|-----|---------|------|--|-----|----------|-----|----------------|--------|---|----|-----|
| | A | | B | 3 | C. | | D | 1 | E | F | G | H. | 1.1 |
| 1 | ABC Corporation | | | | | | | | | | | | |
| 2 | Income Statement | | | | | | | | | | | | |
| 3 4 | | 15 | Tanuary | | February | - | March | - | Totals | Fatio | | | |
| 5 | Revenues | - | | | | | | _ | | | | | |
| 6 | Ewit | 5 | 42.975 | 4 | 49,421 | 1 | 56,834 | 1 | 149.231 | 21.12 | | | |
| 7 | West | | 37,485 | 4 | 43,108 | 4 | 49.574 | 1 | 130,157 | 26.12 | | | |
| 8 | Worth | - 5 | 28,994 | 8 | 33,343 | 18 | 38,345 | 1 | 100.682 | 10.2% | | | |
| 9 | South | 4 | 49,723 | | 42,984 | 1 | 26,081 | 12 | 116,787 | 29.8% | | | |
| 10 | Total Revenues | \$ | 159,177 | -1 | 168,856 | Ŧ | 170,834 | \$ | 498,887 | 100.0% | | | |
| 11 | and the second se | | | | | | | | | | | | |
| 12 | Expenses | - | las and | - | Concession in the local division of the loca | | 1.0000 | 1 | and start | | | | |
| 13 | Supplies | \$ | 37 568 | \$ | 37.452 | 1 | 43,070 | ÷ŧ. | 113,090 | 22.T% | | | |
| 14 | Wages | 5 | 8,440 | -5 | 9,706 | -1 | 71,162 | Æ. | 29,308 | 5.15 | | | |
| 15 | Office Expense | | 961 | 1 | 1,127 | \$ | 1,296 | \$ | 3,404 | ¢.Tv | | | |
| 16 | Utilitius | 1.5 | 1,124 | 3 | 1,291 | 連 | 1,485 | 1 | 3,900 | 0.8% | | | |
| 1/ | Auto Expense | 2 | 1,795 | 5 | 3,063 | 13 | 2,373 | Æ | 6,230 | 1.2% | | | |
| | Other Total Expenses | \$ | 1,420 | 1 | 1,783 | - 5 | 1,555 | 1 | 4,758 | 1.0% | _ | | |
| 19 20 | I ofai Expenses | \$ | 48,327 | 4 | 53,423 | -1 | 60,940 | \$ | 160,691 | 92.2% | | | |
| 20 | Net Profit | 1 | 112,650 | 4 | 115.435 | | 109.893 | 5 | 338 176 | 67.8% | | | |
| 22 | Het Front | 1.4 | 114,000 | * | 114/440 | . ? | (114)032 | | 230,170 | 414.0 | | | |

Figure 10-6: Specify a specific print area

Adjust the Paper Size and Orientation

- 1. Choose File⇒Page Setup. The Page Setup dialog box opens.
- **2.** From the Page tab (see Figure 10-7), select whether you want a Portrait or Landscape orientation from the Orientation section. Portrait orientation prints the top along the short edge of the paper and Landscape prints along the long edge of the paper.
- **3.** Select a paper size from the Paper Size drop-down list. The paper size choices you see depend on the printer you use. The two most common choices are Letter (which is 8.5 inches by 11 inches) and Legal (which is 8.5 inches by 14 inches).
- 4. Click OK.

Make Worksheets Fit Better on a Page

- 1. Choose File → Page Setup. The Page Setup dialog box opens.
- 2. Click the Page tab.
- **3.** From the Scaling area, make a selection from the options shown in Figure 10-8:
 - Adjust To: Enlarge or shrink the printed font size by setting a percentage option between 10 and 400.
 - Fit To: Force Excel to a specified number of pages wide and tall.



Don't try to shrink the document too much. Because Excel shrinks the font, trying to fit too much on a page can make the document too small to read.



Figure 10-7: Choose paper options from the Page tab



Figure 10-8: Squeeze your worksheet onto a specified number of pages

Set Page Margins

- 1. Choose File Page Setup. The Page Setup dialog box opens.
- **2.** Click the Margins tab (shown in Figure 10-9) and set the margins for the top, bottom, left, and right side of the page.



The default worksheet margins are 1 inch on both the top and bottom and .75 inch on the left and right sides.

Click the Horizontally and/or the Vertically options in the Center on Page section to center the worksheet on the page, regardless of the margins.

3. Click OK.

Add a Standard Header or Footer

- 1. Choose File Page Setup. The Page Setup dialog box opens.
- 2. Click the Header/Footer tab. See Figure 10-10.



Headers appear at the top of each printed page and footers appear at the bottom of each printed page.

- 3. Select a header from the Header drop-down list.
- 4. Select a footer from the Footer drop-down list.
- 5. Click OK.

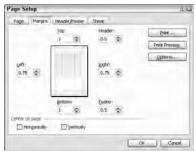


Figure 10-9: Set worksheet page margins



Figure 10-10: Choose a predefined header or footer



Create a Custom Header or Footer

- 1. Choose File⇒Page Setup. The Page Setup dialog box opens.
- 2. From the Header/Footer tab, click the Custom Header (or Custom Footer) button. The Header (or Footer) dialog box appears (see Figure 10-11).
- **3.** In any desired section, type the text you want for the header (or footer).
- **4.** Select any text and click the Font button to select font options.
- **5.** Optionally, click one of the other buttons to insert date or file codes:
 - Page: Insert a code that indicates the page number.
 - **Pages:** Insert a code that indicates the total number of pages.



You can add text to the Page text. For example: Page & [Page] of & [Pages] prints Page 3 of 5 or Page 1 of 2.

- **Date or Time:** Insert the print date or time of day (see Figure 10-12).
- Path, File Name, or Sheet Tab Name: Include file information.
- **Insert Picture:** Insert a graphic image such as a company logo.
- Format Picture: Resize, rotate, or crop a header or footer graphic image.
- 6. Click OK.



Figure 10-11: Add your own text to a header or footer



Figure 10-12: Insert the print date in the header or footer



Specify Repeating Rows and Columns

- 1. Choose File⇔Page Setup. The Page Setup dialog box opens.
- Click the Sheet tab. Type a dollar sign (\$) followed by the row numbers or column letters you want to print as titles in the Print Titles section. Entering \$1:\$2, as you see in Figure 10-13, repeats rows 1 and 2 at the beginning of each page.



Click the worksheet icon on the right to collapse the Page Setup dialog box so you can select the rows or columns you want to include. Click the button again to return to the Page Setup dialog box.

3. Click OK.

Print Gridlines and Column Headings

- 1. Choose File⇔Page Setup.
- **2.** Click the Sheet tab. In the Print section, choose the following options:
 - **Gridlines:** Print the gridlines surrounding each cell in the worksheet.
 - Row and Column Headings: Print the row numbers or column letters around the worksheet.
- **3.** Click OK. Figure 10-14 illustrates a worksheet printed with gridlines and row and column headings.



104

By default, gridlines are a lighter shade of gray. You can change the gridline color by choosing Tools=>Options and selecting a gridline color from the View tab.

| | | 30.1.3 | -Δ·Δ· | | | | |
|-----|--------|--------------------------|--|----------------|----------|---|----|
| | At | * #1 | | | | | |
| | . A. | | | P | | 6 | 11 |
| 11 | | | MUSIC COLLECTION | | | | |
| 2.5 | Track. | Name | Artist | ting Play Date | Cost | | |
| 3 | 10200- | Bon Culetty | | Startey | \$ 12:00 | | |
| 13 | 7 | Covernov Love | Contracting of the second s | Thursday | \$ 14:00 | | |
| 5.0 | 1 | It Doesn't Get Any Court | Fage Mages JeaderFolder Devt | Salurday | \$ 8.00 | | |
| 6 | 4 | Intiniara Man | Triet gans Di Batt. | Monday | \$ 11:00 | | |
| 201 | 14 | One Naht Stand | | Friday | S LACEL | | |
| B | 6 | Rain on the Scarecrow | Princi Maler | Toenday | \$ 15.00 | | |
| 9 | 1 | Something to Talk About | | Thursday | \$ 13.00 | | |
| θĽ. | 15 | Stuck on You | | Wednesday | \$ 1500 | | |
| 1 | G | Triard Rock from the Son | Statute to repeat at arts | Sanday | \$ 20.00 | | |
| 31 | 10 | Achy-Breaky Heart | interior and in the second sec | Friday | \$ 10.00 | | |
| 31 | 11 | Give it to Ma Straft | El Gedren El Anvierd DAprit Headres | Tuesday | 1 30.00 | | |
| 4 | 12 | I Warna Talk About Ma | El Bio excitte Cogneto: David. | Salurday | \$ 15.00 | | |
| 15 | 13 | Night Tran To Momphis | Elé a la l | Monday | \$ 13.00 | | |
| s | 14 | Sold The Grunty Court | Case Block We (Chickward 1961 | Siturfay | \$ 12.00 | | |
| 2 | 15 | Except for Monday | Page adde | Sahaday | \$ 800 | | |
| 6 | 15 | Small fown | [ings spo] | Thursday | \$ 11.00 | | |
| 9 | 17 | Truck Dever Man | · Daw, then per | Tuesday | \$ 10.00 | | |
| | 18 | Two of a Kind, Workin' a | C Oger, then down | Saturday | \$ 11.00 | | |
| 11 | 19 | Down on the Farm | | Enday | \$ 15.00 | | |
| 2 | 20 | Every Time You Say Ge | T m V m | Siturday | 1 9.00 | | |
| 6 | 21 | Hund Dag | DC Cave | Monday | \$ 12.00 | | |
| 74 | 22 | 1 Gotta Kitow | El-s Pre Vey | & Wetnesday | \$ 14.00 | | |
| 5 | 23 | Peckup Mam | Jan Diffe | 5 Friday | 1 15:00 | | |
| 5 | 24 | Filinds in Low Places | Gam Binsks | Safurday. | £ (6.00 | | |
| 72 | 35 | Walch Me | Usine Mergan | 1 Saturday | 1 1200 | | |
| 韵 | 25 | Telechare Man | Mei) Witton | n Tunsday | 1 800 | | |
| 6 | 27 | Inden Explan | Tan McGraw | 5 Friday | \$ 900 | | |
| 9 | 28 | Pull My Chain | Teby Keith | 6 Miedau | \$ 1100 | | |
| 11 | 29 | Roll on (12 Wheelar) | Alahama | 1 Heartdee | 1 10 00 | | |
| | 30 | Refired Dreams | Tim McGraw | Saturday | 6 30 00 | | |
|) | 31 | | the World Stopped Tuming Alan Jackson | 7 Wednesday | F 100 | | |
| | | wet1/Gent2/Stent3 | | Telesconder . | 1 100 | | 13 |

Figure 10-13: Select rows or columns to repeat at the top of each page

| | A | | B | | E. | 1 | .D | | E | F |
|----|-----------------|-----|-----------|----|----------|----|---------|-----|----------------|--------|
| ŧ | ABC Corporation | | | | | | | | | |
| 2 | | | Incor | ne | State | me | ent | | | |
| ÷ | | 1- | | 1 | | 1 | 210 | 1 | | |
| 4 | | 13 | lansary . | | February | 1. | March | | Tetals | Pake |
| 5 | Revenues | 1. | | | | 1 | | | | 1 |
| 5 | East | 8 | 42,975 | 5 | 49,421 | 5 | 56,634 | 5 | 149,231 | 11.15 |
| T | West | \$ | 37,405 | 5 | 43,105 | 5 | 49.574 | ş | 130,167 | 1915 |
| 3. | North | 1 | 28,994 | \$ | 33,343 | 5 | 38,345 | 5 | 100 682 | 1015 |
| £ | South | 1.5 | 49722 | 3 | 42,984 | 5 | 26,081 | 15 | 116 787 | 2595 |
| Q, | Total Revenues | 1.5 | 158,177 | 3 | 168,855 | Ŧ | 178,834 | 3 | 498 567 | 100.01 |
| Т | | 1 | | | | | | 1 | | |
| | Expanses | 1.0 | | | | 1 | 200.02 | | and the second | No. |
| Ξ | Supplies | 5 | 32,568 | 5 | 37,453 | 5 | 43,070 | 5 | 113,090 | 11.3% |
| A | Wages | \$ | 0,440 | 5 | 9,706 | 5 | 11,162 | 5 | 29,308 | 5.8% |
| 5 | Office Expense | - 5 | 981 | ş | 1,127 | ¥ | 1,3% | ÷ | 3,404 | 075 |
| Ð | Utilities | 1.5 | 1,124 | 5 | 1,291 | \$ | 1,495 | 5 | 3,900 | |
| 7. | Auto Expense | - 5 | 1,795 | 5 | 2,063 | \$ | 2,373 | ¥ | 6,230 | 125 |
| 8 | Other | 5 | 1,420 | 5 | 1,783 | 5 | 1,555 | 5 | 4758 | 1.0% |
| Я | Total Expenses | 1. | 46,327 | F | 53,423 | \$ | 60,940 | 1.8 | 160,691 | 71.15 |
| 0 | ALCON A | 1.5 | | | | | - | 1 | 1.0.1 | - |
| 1 | Nat Profit | 5 | 112850 | 5 | 115,433 | 15 | 109,893 | 5 | 338.175 | 6135 |

Figure 10-14: A printed worksheet with column and row headings and gridlines

10

Print Worksheets and Charts

1. Choose File⇔Print. The Print dialog box, shown in Figure 10-15 appears.



Optionally, print the worksheet immediately by clicking the Print button on the Standard toolbar.

- **2.** Choose from the following options:
 - Name: Select a printer different than the default printer.
 - **Print Range:** Specify whether to print the entire worksheet as determined by the print area, or whether to print only specific pages.
 - Copies: Select the number of copies you want to print.
 - **Print What:** Choose whether to print the current worksheet, a preselected area, or the entire workbook.
- 3. Click OK.

E-Mail a Workbook

1. Choose File⇒Send To⇒Mail Recipient (as Attachment). As you see in Figure 10-16, your e-mail program launches with the worksheet as an attachment.



Recipients must have Excel installed on their systems to open the workbook file. If they don't have Excel, send the worksheet as the body of the e-mail instead of an attachment by choosing File=> Send To=>Mail Recipient.

- **2.** Enter the recipient e-mail information and enter any additional text in the body of the message.
- **3.** Click the Send button.

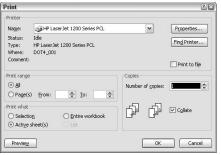


Figure 10-15: Select from a plethora of print options

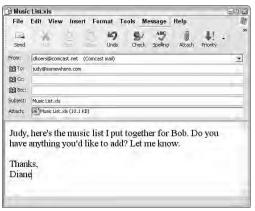


Figure 10-16: E-mail Excel information to others



Part IV Analyzing Data with Excel



"Somebody got through our dead end Web links, past the firewalls, and around the phone prompt loops. Before you know it, the kid here picks up the phone and he's talking one on one to a customer."

| Chapter 11: Working with Outlines1 | 0 | 9 |
|------------------------------------|---|---|
|------------------------------------|---|---|

| Generate a Subtotal | |
|------------------------------|-----|
| Collapse Subtotal Headings | |
| Control Individual Subtotals | |
| Create Multiple Subtotals | |
| Copy Subtotals | |
| Remove Subtotals | |
| Use AutoOutline | 114 |
| Form an Outline Group | 115 |
| Remove Items from a Group | |

Chapter 12: Filtering Data117

| Create a Data Entry Screen | 118 |
|--------------------------------------|-----|
| Filter Data with AutoFilter | 119 |
| Perform a Secondary Filter Selection | |
| Select Only the Top 10 | 121 |
| Customize an AutoFilter | |
| Find Multiple Criteria | 123 |
| Use Advanced Filtering | |

Chapter 13: Creating Pivot Tables127

| Create a PivotTable | 128 |
|-------------------------------|-----|
| Select and Manage Pivot Data | 131 |
| Change the Calculation Type | |
| AutoFormat PivotTables | |
| Apply Page Fields | |
| Generate Separate PivotTables | |

| Format PivotTable Values134Generate Multilevel Totals135Group Data Together136Calculate a Percent of Totals136Add Your Own Calculations137Create a PivotChart138Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149Check for Formula Errors149 | Rename a Field | 134 |
|--|--|-----|
| Group Data Together136Calculate a Percent of Totals136Add Your Own Calculations137Create a PivotChart138Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro143Stop a Macro143Delete a Macro144Delete a Personal Macro144Create a Custom Toolbar146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Format PivotTable Values | 134 |
| Calculate a Percent of Totals136Add Your Own Calculations137Create a PivotChart138Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro.142Assign a Macro KeyStroke142Create a Macro143Stop a Macro143Delete a Macro144Delete a Personal Macro144Create a Custom Toolbar146Create a Custom Toolbar146Mat Special Characters146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Generate Multilevel Totals | 135 |
| Add Your Own Calculations137Create a PivotChart138Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro144Delete a Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar147Merge Columns148Manage AutoCorrect149 | | |
| Create a PivotChart138Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar147Merge Columns148Manage AutoCorrect149 | Calculate a Percent of Totals | 136 |
| Chapter 14: Building Simple Macros139Record a Macro140Check Macro Security Level141Run a Macro.142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar147Merge Columns148Manage AutoCorrect149 | Add Your Own Calculations | 137 |
| Record a Macro140Check Macro Security Level141Run a Macro.142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar147Merge Columns148Manage AutoCorrect149 | Create a PivotChart | 138 |
| Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Chapter 14: Building Simple Macros | |
| Check Macro Security Level141Run a Macro142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Record a Macro | 140 |
| Run a Macro142Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | | |
| Assign a Macro KeyStroke142Create a Macro Toolbar Button143Stop a Macro143Delete a Macro144Delete a Personal Macro144 Chapter 15: Saving Time with Excel Tools 145Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | | |
| Create a Macro Toolbar Button | | |
| Delete a Macro | | |
| Delete a Macro | Stop a Macro | 143 |
| Chapter 15: Saving Time with Excel Tools145Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Delete a Macro | 144 |
| Add Special Characters146Create a Custom Toolbar146Split Data into Multiple Columns147Merge Columns148Manage AutoCorrect149 | Delete a Personal Macro | 144 |
| Create a Custom Toolbar | Chapter 15: Saving Time with Excel Tools | 145 |
| Split Data into Multiple Columns | Add Special Characters | 146 |
| Merge Columns | Create a Custom Toolbar | 146 |
| Manage AutoCorrect149 | Split Data into Multiple Columns | 147 |
| Manage AutoCorrect149 | | |
| | - | |
| | | |

Work with SmartTags.....150

Working with Outlines

You can use Excel to automatically calculate subtotal and grand total values from rows containing related data (sometimes called a *database*). When you create subtotals, Excel outlines the list so that you can display and hide the detail rows for each subtotal.

Before you use the subtotal function, you must first sort your list so that the rows you want to subtotal are grouped together. You can then calculate subtotals and other mathematical calculations for any column that contains numbers, or you can count the number of items in a selected field.

If your data is not in a database format, you can still group sections together, allowing you a quick way to display or hide the sections as needed. Similar to using subtotals, Excel displays groups in an outline format. In this chapter, I take a look at the extensive subtotaling, grouping, and outlining features contained in Excel.

Chapter 71

Get ready to . . .

| 🛥 Generate a Subtotal | 110 |
|--------------------------------|-----|
| 🗝 Collapse Subtotal Headings | 111 |
| 🗝 Control Individual Subtotals | 111 |
| 🗝 Create Multiple Subtotals | 112 |
| 🗝 Copy Subtotals | 113 |
| 🖚 Remove Subtotals | 113 |
| ➡ Use AutoOutline | 114 |
| ➡ Form an Outline Group | 115 |
| ➡ Remove Items from a Group | 115 |

Generate a Subtotal

1. Sort the field by which you want to generate subtotals.



The subtotal data must have no blank rows or columns, and each column in the database must have a label in the first row.

- **2.** Choose Data Subtotals. The Subtotal dialog box appears.
- **3.** Select the field you want to subtotal from the At Each Change In drop-down list.
- 4. Select a function from the Use Function drop-down list. Choices include SUM (totals the values in a field), COUNT (returns the quantity of items in a field), AVERAGE (determines the average value of a field), MAX and MIN (display the highest and lowest value in a field), and PRODUCT (returns the value of all the numbers in a field multiplied together).
- **5.** Select the fields you want to subtotal from the Add Subtotal To drop-down list. (See Figure 11-1.) You can select more than one field to subtotal.
- **6.** Check the Replace Current Subtotals box if you already have a previous subtotal calculation. Excel replaces the previous subtotals with the new one.
- 7. Check the Page Break Between Groups box if you want Excel to begin each subtotaled group on a new page.
- **8.** Remove the check from the Summary Below Data box if you want Excel to place the subtotals at the top of each group instead of under each group.
- *9.* Click OK. Excel performs the subtotal. Figure 11-2 shows sales subtotaled by Sales Rep.

| Subtotal | × |
|-----------------------|-----------|
| At each change in: | |
| STATE | ~ |
| Use function: | |
| Sum | • |
| Add subtotal to: | |
| | ~ |
| STATE SALES | ~ |
| Replace current subto | otals |
| Page break between | |
| Summary below data | |
| Remove All | OK Cancel |

Figure 11-1: Select fields to calculate

| Eile Leit View Insert Ferner Tools Data Window Help 1 1 2 1 2 4 2 7 2 4 4 2 7 7 7 8 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | |
|--|-----------------------|-----------|------------|----------|-------------|---|----|---|
| | 「「日日本」をはな | 08.08 (d | · 4-1 | | | | | |
| CUSIONS | B CUV | STAR | D SALES | E | SALLS REP | 6 | 15 | |
| 1 | Litt | B. Intal | E10.76 | 100 | SPREATER. | | | |
| A INRI PAPERS | PHOEIgs | 47 1 | 1688.59 | 401.82 | SMITHERS | | | |
| 5 LVTVI SOLOMONICO. | TUCSON | 42 | 1.791.95 | 107.52 | FORD | | | |
| E. IMARIED FROMGS CORP. | HOT SPRINGS | 42 | 1455.48 | 99.33 | HADETT | | | |
| 7 LONDON POOLS | PHOBIES | AT | 1,721 17 | 103.34 | ANDREWS | | | |
| B S Shvakbarg a scars be | SCOTTIZALE | 12 | 1.758-91 | 105.41 | LOWE | | | |
| D | Second second | AZ Total | 3.615.20 | 106.11 | TALL OF THE | | | |
| 10 WICZIATTA WEWLD | FRIESNES | CA | 2,018.02 | 321.00 | HRE) | | | |
| 11 PRVICE TO LANS PRAMAY | VANANAJES | CA | 1,040,29 | 110.42 | WILKER | | | |
| 12 . FRSCED | CANLAND | CA. | A 545.00 | 272.70 | BERRG | | | |
| 13 TO CRICK PERMITY, 24 | 105 1052105 | CA | 32/022 | 100.03 | 0.025 | | | |
| 14 FEINE & FITFICT XING | 105 AVGBLES | CA | 2,716.00 | 162.96 | EDWARDS | | | |
| 15 HER WARRING TS | HATTHATTA | CA. | 2.228.00 | 139.68 | RUCLER | | | |
| 35 - CRISTANE FOR ARRY | 19. FUTUESTICAL BEACH | Cé | 2.272.63 | 130.36 | FORD | | | |
| 17 HERVAY SE VERMIN | XXXX4 LL TREE | -CA | 2 318 08 | 176.08 | XXES | | | |
| 18 PAUL PAL | ANZER | Ca | 1.627.79 | 109.67 | ATAFE. | | | |
| AT IMPLIAN | 10 MIL-12-02 | CA | 1,054,34 | 111.06 | RACIER | | | |
| 30 PYGART PIPARRY | CAPITOLIA | C.h | 1.901.63 | 114 10 | FORD | | | |
| THE BUT OF CRAITING | CHATSWORTH | Ca | 1.939.56 | 316.30 | KNES | | | |
| 22 IRT OF RIVES - LA TREIA DADE | WAN HATTE | Ch. | 1.904.20 | 108.25 | PRINT | | | |
| 23 ISPARY & GADIC | OLAVER CITY | Ch | 1,978.46 | 119.71 | FLO FR | | | |
| 24 ITE POOLS BC. | LA MELA | Ca | 2 364 44 | 141.07 | LOWE | | | |
| 25 BRICH BUT ARRITICHE | FARFAI | CA | 2 (25) 29 | 123.50 | STAFS. | | | |
| 35 ASMITH | VALINDIS | 64 | 5.364.10 | 361.85 | EDWARDE | | | |
| -27 JVPI (2.1.84 | LAGUNA DENCH | 04 | 2.411.72 | 144.70 | FRAME. | | | |
| 20 D.T. HAS Y COMPANY | LOS ANGELES | DA | 2,509.16 | 150.95 | HADETT | | | |
| 29 RES DESIGNES | LOS MERLES | Ch | 2 662 74 | 159.76 | IN MAY | | | |
| 30 30, 242 | 105 (2001)(8 | Cit. | 2.492.96 | 147.60 | EDWINPES. | | | |
| 31 XLAPSBA FIRARRY | 105 INSELES | 5A | 2,625,72 | 109.54 | SMITHERIS | | | |
| 22 KILING DESIGNAR CRISTEMIN | LOS MIGELES | Cé | 2,270,32 | 166.22 | 0.0026 | | | |
| ST LAMP & C/O NAE LAVY | WCODLAND HOLL | 64 | 1.977.09 | 112.63 | LOWE | | | |
| 14 LITTI | LOS ANGELES | EA | 2,882,24 | 172.93 | EDWARCIS | | | |
| TO CHARTER DE | 105 MERIES | Cé | | 126.39 | SMT1805 | | | |
| + Dastomer List A / Customer List & | / | | 5 1095 (M | 21112.04 | | | | х |

Figure 11-2: A subtotaled worksheet



Collapse Subtotal Headings

1. Create subtotals of your data. (See the preceding "Generate a Subtotal" section.)



With subtotals, Excel defines groups in the form of an outline and bases the groups on the rows used to calculate the subtotals.

- **2.** Hide and show data as you need with the following methods (see Figure 11-3):
 - See only the grand total. Click the 1 on the subtotal headings.
 - See the subtotal categories and amounts (the detail is hidden). Click the 2 on the subtotal headings (the column on the left side of the worksheet).
 - Show all the detail and subtotals: Click the 3 on the subtotal headings. Excel displays the individual work-sheet rows.

Control Individual Subtotals

- 1. Create subtotals for your data (see the "Generate a Subtotal" section, earlier in this chapter).
- **2.** Click the Hide Detail button (minus sign) next to any subtotal row. As seen in Figure 11-4, the selected subtotal detail collapses. It's not lost, only hidden.
- **3.** Click the Show Detail button (plus sign) next to any subtotal row. The detail data for the selected row appears.



Optionally, choose Data=>Group and Outline=>Hide Detail or Show Detail.

| 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | View insert Format Insis | | 11.41 ml | 1005 | | | - | 1-8- |
|--|--|-------------------|-----------|--------------|------|----------------|------|------|
| Informa | ······································ | | | | | | | |
| 10- | A DESIDNER | e OTV | STATE | D SALES | E | F SALES REP | -ti | н - |
| | LISTUMES | CHA | FL Total | 810.76 | 1425 | SALES REP | | |
| 100 | | | A2 Total | 8.615.20 | | | | |
| TE | | | CA Total | 387,250,25 | | | | |
| 市山 | | | CII Total | -81.422.54 | | | | |
| 16 | | | Ct Total | 20.546.58 | | | | |
| 2007 | | | DE Total | 2.045.04 | | | | |
| 100 | | | DE Total | 5.692.20 | | | | |
| 147 | | | ft total | 252,583,23 | | | | |
| 202 | | | GA Total | 498.718.08 | | | | |
| 7814 | | | HA total | 4,576,07 | | | | |
| 207 | | | HI Total | 14.578.62 | | | | |
| 213 | | | IA Intal | 27, 215, 292 | | | | |
| 調 | | | R. Total | 4,231,351,92 | | | | |
| 424 | | | IN Total | 4,056,43526 | | | | |
| 400 | | | 10 Total | 205.60 | | | | |
| 430 | | | KS Intal | 474.58 | | | | |
| 457 | | | KY Tartal | 1.129.03 | | | | |
| 500 | | | LA Total | 1,139.31 | | | | |
| 518 | | | MA Total | 3,020,26 | | | | |
| 577 | | | MO Total | 966.10 | | | | |
| -51f | | | MI Total | 2.061-23 | | | | |
| 243 | | | MV Total | 4,796.10 | | | | |
| 420 | | | AND Total | 3,095.72 | | | | |
| 西南部所近 | | | Mis Total | 579.44 | | | | |
| 354 | | | MT total | 561.75 | | | | |
| 570 | | | NC Total | 201624.00 | | | | |
| 5 (117.1) | | | ND Total | 1,497.27 | | | | |
| - m | | | NH fotal | 2,365.08 | | | | |
| · 200 | | | NJ Total | 19,009.4⊖ | | | | |
| • 109 | | | NM fotal | 145,476.90 | | | | |
| · 111 | | | NV Total | 11,377.94 | | | | |
| · 753 | | | NV Total | 2,302.105.14 | | | | - |
| | mer List A / Guittener Un 1 / | | THI TOTAL | 1.025.20.40 | | | | 100 |
| | aShapesr > > [] [] [] [] | CHERTER Disasters | | | | | | |
| ale and | NUMBER OF STREET | | | | | | - an | |
| | | | | | | | 1000 | |

Figure 11-3: Collapse and expand entire subtotal sections

| 3 | - 6 - 6 - 7 - 8 - 8 - 9 - 9 | 문 너 노 너 또 또 Clify HOL WOOD | C | -A-I | | | | | |
|-------|--|----------------------------------|--|------------|---------|---|------|------|------|
| - 10 | R CUSTOMER WHAT PAPERS | CITY | 5 | | | | | | |
| 1 10 | ANNAY PAPERS | CITY | Contraction of the local division of the loc | | | - | 10- | in . | - |
| 3 | ANNAY PAPERS | | STATE | SALLS | TAX | SALLS REP | 10 | a | - 27 |
| | | | - FL | 810.75 | 48.65 | ANDERSON | | | |
| 6 h | ANT PAPER'S | C.C. Wilder | H. Total | 810.76 | 40.000 | | | | |
| | | PHOENDY | - 42 | 1,603.50 | 101.35 | IMUTHIRS. | | | |
| 7. B. | VIN 1. SOLOMON CO. | FUCSON | AZ. | 1,791.95 | 107 32 | FORD | | | |
| | MARSON FINORASS COPP. | HOT SPRINGS | AT | 1,655.48 | 99.33 | HADIETT | | | |
| | NEON POCES | PACENDI. | 67 | 1,722.37 | 103.34 | ANEWENS | | | |
| | SEVARAPIGIS SCHE, PC. | SCOTTERAL | AZ. | 1,756.41 | 105.41 | LOAF | | | |
| 61 | THE PERSON OF THE PERSON OF THE | Second Second | A2 Total | 8,615.20 | Proces. | SATE. | | | |
| 76 | | | CA Total | 387,250,21 | | | | | |
| | ALLAS AS ADARY | ROLOFE | 00 | 1,952,92 | 117.18 | WALKER | | | |
| | TO 2 TREDARS, DK. | LAKENOOD | 60 | 7,019,18 | 191 15 | PRUETT | | | |
| | OPTIONS | BOULDER | 60 | 1/991.98 | 119:52 | LOWE | | | |
| | 2VALISSAS | BOADER | 00 | 2,031,82 | 121.91 | PRIATT | | | |
| | BLAS GLIMSTONAS SARVICAT | DEMARK | 00 | 7,072.48 | 124.00 | WALKER | | | |
| | THE PARTY PA | DEMER | 00 | 2.113.91 | 126.83 | LOWE | | | |
| | ING SPACETY CO., INC. | DEWER | 00 | 2,156 19 | 129,37 | PRUETT | | | |
| | THE NG-CUT & STORAD GLINS | DENVER | 00 | 2,196.33 | 131.96 | WALKER | | | |
| | HARRY COMPLET | ALRORA | 50 | 5.007.03 | 150.02 | EDWARDS | | | |
| | KAN'S FIPARE'S MEG. | | 00 | | 367.02 | BLENDAG | | | |
| | | BOULDER | 00 | h 116-97 | | | | | |
| | ASTARN STONA IND MATE CORP. | LAFAYETTE | | 7,288.16 | 137.29 | 112094 | | | |
| | NETLED DAVALOPMANT | BOLLDER | - 00 | 6,239.33 | 374 | SMITHERS | | | |
| 習い | THA HINSON & ASSOCIATES | BACKEW100 | 00 | 8,243.30 | (34.9) | LOWE | | | |
| 30 | | | CO Tutal | 40,422.54 | | | | | |
| | IS DETISTS, PIPARRY, DK. | REPLIN | ST. | 0,525.76 | 392.15 | 81.872245 | | | |
| | ENO PAPERS | FASPIED | CT | 2,714,57 | 16A/07 | 3,42958 | | | |
| | FORDABLE PAYDAY LOANS, INC. | MARRIEDALE | CT | 10,512.35 | 630,74 | MONEEL Y | | | |
| 94 h | LANPAPIERS | SIMBELRY | CT | 264.00 | (5.64 | PRUETT | | | |
| 商 | | | CI total | 30,546,68 | | | | | |
| 爾爾 | OOVY ROIDS | WASHINGTON | DC. | 2,845.04 | 170.70 | DAVIS | | | |
| 97 | | | DC Total | 2,845.04 | | | | | |
| | BEG OPPEAR DELEGAS, INC. | WOMINGTON | DE | 2,789.26 | 167.36 | HADETT | | | |
| | RECENT CORPORITION | WRINEACTOR | DE | 2,901.94 | 174,12 | 3.642982 | | | |
| th) | and a second second second | 1201000000000 | DF Total | 549120 | | | | | 1 |
| *1/6 | untomer Lest A / Guitomer Lat B / | | | P.L. | | and the second se | 100 | | 181 |
| | AutoShapes- + [] . | A HILL Drade. | A - = = = = | 1.11.2 | | | | | |
| 10074 | and the second s | and the second second | Contraction of the local division of the loc | 10.0 | | | - 44 | 1- | |

Figure 11-4: Collapse and expand individual sections

Create Multiple Subtotals

- 1. From the Sort dialog box, select the column by which you want to generate primary subtotals and the column by which you want to generate secondary subtotals. For example, if you want to first subtotal sales by state and then by city, you would also sort first by state and then by city.
- 2. Choose Data⇔Subtotals to display the Subtotals dialog box.
- **3.** Select the primary field you want to subtotal from the At Each Change drop-down list. Figure 11-5 shows the primary field as the State field.
- 4. Select a function from the Use Function drop-down list.
- *5.* Select the fields you want to subtotal from the Add Subtotal To drop-down list.
- 6. Click OK. Excel summarizes the data by the selected field.
- 7. Choose Data⇔Sort. Excel again displays the Sort dialog box.
- **8.** Select the secondary field you want to subtotal, the type of function, and the fields you want to subtotal. In my example, I use the City field.
- 9. Deselect the Replace Current Subtotals box.
- *10.* Click OK. Figure 11-6 illustrates both the sales amount and the sales tax subtotaled by state and then by city.



As you perform additional subtotaling, Excel adds additional levels. In Figure 11-6, four heading levels are displayed. Level 1 displays only the grand totals, level 2 displays the totals by state, level 3 shows the totals by city and state, and level 4 displays the detail.

| | # # # # # * ** | 1.12.21.00.00 | A- | 100 | | | | |
|------------------------------|--------------------|---------------------------|---------------------------|---------|------------|---|-----|-----|
| At · A DUSTOMER | 0 | 1.10-1 | D. | - | | 6 | -11 | - 1 |
| CUSTOMIR | CITY | STAT | EALTS | TAX | SALIS RIP | | | |
| 2 PAURICIN FINCINGS CORP. | HOT SPRINGE | 42 | 1.655.48 | 9133 | HADIETT | | | |
| A HEMARI PAPERS | PHOENIX | AZ | 1,089,99 | 101.32 | SMITHERS | | | |
| E LONDON POORS | PHOTO: | 102 | 1,722.37 | 202.34 | MEREWS. | | | |
| E SEVARBARG & SCHE DAL | SCOTTERA Subind | | ALCONOMIC TRANSPORT | 105.41 | LOWE | | | |
| EVAL SCEWOLCO | FLOSON | -0 | 14 | 301.52 | ECRO | | | |
| 7 DAUDE DAT | | DOMEST IN: | 120 | 209.67 | XYAN . | | | |
| DALLEN. | BURBANK STATE | | | 111.00 | FLOIR | | | |
| DAGARY POWERY | CARDING & | | | 114.10 | FOID. | | | |
| O DET OF CRAITION | CHATENCE UP AN | diórili | | 116.70 | 10400 | | | |
| ESPARY & GADEG | CLAVER CTI S.M | | 1 | 118.71 | RECEP | | | |
| 2 DI NYR PA INTARIGTERAL | FADIFAX Addam | and all the | | 122.50 | XWEE | | | |
| BIGAATTA WORLD | FRESNO 1174 | | * | 121.08 | FORD | | | |
| POCKS PLOS PLPERS | TRASS VAL 7 SAU | | 1756 | 125.07 | RICHER | | | |
| 5 POCLIBARRY | HOLLWICO LETAN | | 114 | 128.49 | FORD | | | |
| POOLSEMITH DIRRALL HELHOUSA | HOOPA | | Contraction of the second | 131.06 | XNES | | | |
| 7 POLIN PRODUCTS | HANTINGTO PINA | and a structure transport | | 133.68 | RIGHT | | | |
| B HERE WAR PERAREY | HANTINGTO LEND | | | 195.36 | ROND | | | |
| 9 HRVAY SELVARMEN | XISHUA TRI EVISION | | ×1 | 139.08 | XMES | | | |
| O TTA POOLS, DIC | LAMPSA | and a second second | | 241.07 | LOWE | | | |
| H INTERIORS | LARAM RE LARM | VEAL DC | Cent. | 144.70 | FRANZ | | | |
| COLORION PEPAPERIO INC. | LOS ANCELES | UR | 316727 | 190.93 | BLENING | | | |
| E FRIM IS PITRICI ARKS | LOG APPERING | 128 | 2,716.00 | 16, 96 | HOW/HOW | | | |
| 4 D.T. HALLY CONFWINT | LOS ANGRES | CA. | 2,5797.36 | 192.05 | HADETT | | | |
| E INS DESIZAS | LOS ANCELES | CA | 2,662.74 | 159.76 | FRANCE | | | |
| S P. WC | LOS ATROPLES | Ca . | 2,455.96 | 247.60 | KOWINPOS | | | |
| 7 KAAPSIKA PIPARRY | LITS WATERS | Eb. | 2.625.72 | 107.54 | SAUTHERS | | | |
| S KILPA DELEZAR CHIFTENIN | LOS ANGELES | EA. | 2,770.02 | 1/6.25 | W. ENDING: | | | |
| 9 LTT | LOG MARLES | 2.8 | 2,182,24 | 172.08 | HEWINKERS. | | | |
| LIWSONS, INC. | LOS ANGRES | EA. | 2,939.88 | 176.39 | SMITHERS | | | |
| T LOCIS DEDON USE, INC. | LOS ANGELES | CA. | 2,998.60 | 3,75,52 | RORD | | | |
| 2 LUD(Y GLUAS CUTTING | LOS ANGELES | CA | 3,058.65 | 181.52 | SMITHERS | | | |
| D M G L PEARRY MEG_INC | LOS ANGELES | DA | 3.119.83 | 167.15 | EDWARDS | | | |
| A PANERA STATES A ASSOCIATES | LOS MOREE. | CA | 2512.52 | 210.01 | IPM/MING | | | |

Figure 11-5: Select the first field you want to subtotal

| licinesit Excel - Customer best | Carlo and Carlo | | _ | | | | -124 |
|---|--|--|-------------|---------|-----------------------|---------------|------|
| Elle Edit View Insert Format Tool | | And a Distant and | | | 100.000 | and its first | 4 |
| 34314370A43 | the second s | 1 4463 10 | | | | | |
| 10 • 01 • 01 • 10 • 10 • 10 • 10 • 10 • | #田本県・田田県 | a | A- | | | | |
| A | B | 6 1 | | 2 | 1 | 6 | 4 |
| - A HONRY PARENTS | INCOLUCY. | 62 | 1,681.59 | 101.101 | SAUTHERS | | |
| < A LONDON POOLS | PHCENEX | άZ. | 3,722.37 | 103.34 | AND REWS | | |
| | EVERINDS Total | | 3,410.96 | 204-66 | | | |
| - 7 E. SE VARIANG & SCHOL PK. | SCOTTEDALE | - 62 | 1,756.85 | 105.41 | LOWE | | |
| a all and a second s | SCOTTSDALE Total | | 1,756.81 | 105.41 | - POLITE | | |
| - 9 ILV9/ L SOLOMONICO | TUCSION | 82 | 1,791.95 | 107.52 | FORD | | |
| - 10 | TUCSON Intal | | 1,791.95 | 107 52 | rond | | |
| II | incons into | A2 lotal | 8.015.20 | 516.91 | | | |
| [12 DAUS, DA | WITH | Cá | 1,4127.79 | 199.67 | 104455 | | |
| 15 | ANZA Total | | 1,827.74 | 103.67 | COMP. | | |
| I - 14 IMACH | BURBAN | 124 | | 111.96 | RUDER | | |
| Les is principl | | CA | 1,964,34 | | NUCCES | | |
| P. In a class man include | CARITOLA | 04 | 1/964-14 | 111.00 | ECRD | | |
| - TE DAGART PIRARRY | | . 08 | 1901.63 | | HONO . | | |
| F III management | CAPITOLA Total | - | 1,901,63 | 114.10 | and see | | |
| T . TE INT OF CRAITION | CHATGWGROTH | CA | 1/038/96 | 116.30 | SNET | | |
| | DHATSWORTH Total | and the second s | 1,939.66 | 116-38 | and the second second | | |
| - 20 EFARY & GLADG | SULVER CITY | SA. | 1,970,46 | 118,71 | RUCORM | | |
| 5 21 | CULVER CITY Total | | 1/978.46 | 116.71 | | | |
| - 22 ILRICH INTARNETICNE | FARFAX | Cit | 2,056.39 | 123 90 | 00MES | | |
| (* 2) | FAIRFAX Iotal | | 2,058.79 | 128,50 | | | |
| Managatta WORLD. | FRESNO | CA | 7,018.03 | 121.02 | FORD | | |
| ÷ × | FRESNO Total | | 2,018.03 | 171.08 | | | |
| - TE IPOD & PUR PAPERS | GPEASE VALLEY | CA. | 2,099.55 | 125-97 | RUCCEM. | | |
| E # | GRASS VALLEY Total | | 2,090.55 | 125.97 | | | |
| - 38 (PODLENARY | HOLL WWDOD | C4 | 3:141.55 | 128-49 | FORD | | |
| - 39 | HOLLYWOOD Tatal | | 2,141.55 | 126.49 | | | |
| 1 - 30 POOLEENITH, DERRALL HELHOUSA | HOOPA | 64 | Z.194.39 | 131.06 | XMES | | |
| - 31 | HODPA Total | | 2,194,99 | 131.00 | | | |
| - 32 HERL MARRICELE THE | #A,INTDUSTION | 64 | 2,228.06 | 133.68 | RECORD | | |
| - 15 | HUNTINGTON Total | and the second second | 2,229.00 | 133.68 | | | |
| C . 34 HERRITER PENARA | INP/TRISTON BEACH | CA | 3,272.63 | 106.38 | POVD | | |
| | HUNTINGTON BEACH Tot- | | 2,272.63 | 136.36 | 1000 | | |
| I . SE HERVAY SELVARMEN | 305HJA TREE | 64 | 2,218,09 | 139,38 | OWES | | |
| 37 | WHEN THE TOTAL | | 1 110 00 | 130.00 | sofo | | |
| · · · Cantomer List A / Cantomer List & / | and the second se | | 10, 200 100 | | | | - 36 |
| www AutoShapes · · · · · · · · · · · · | A PART OF THE RANK OF | | | | | | |
| the Managements, a strate | | | 8 E | | | | |
| a provide the second | and the second sec | | | | | 14.64 | |

Figure 11-6: Click the heading levels to expand or collapse the subtotals

Copy Subtotals

- **1.** Hide any unwanted Detail button by clicking the Expand or Collapse buttons.
- 2. Select the data you want to copy.
- **3.** Choose Edit⇔Go To, which displays the Go To dialog box.
- **4.** Click the Special button. The Go To Special dialog box opens (see Figure 11-7).
- *5.* Select the Visible Cells Only option. White lines appear around the selected cells.



Another use for the Go To Special dialog box is if you want to select only cells with constant values or to select only cells containing formulas.

- 6. Click OK.
- 7. Choose Edit⇔Copy (or press Ctrl+C). A marquee appears around the selected cells.
- **8.** Select the beginning cell where you want to place the copied data.
- **9.** Choose Edit Paste (or press Ctrl+V). Excel duplicates only the subtotaled values, not the formulas or hidden cells.

Remove Subtotals

- Choose Data ⇒ Subtotals. The Subtotal dialog box opens (see Figure 11-8).
- **2.** Click the Remove All button. Excel removes all subtotal information from the database.

| 134314324 A 4 | the same in the second s | | | | | | |
|-----------------------------------|--|--|----------------------|----------|---------------------------|---|------|
| | 第第日本本・協会(第) | # A | - A- | | | | |
| At - A CUSTOMER | 0 | 6 | 0 | | Contraction of the second | 5 | - 44 |
| CUSTOME | CITY | STAT | SALIS. | TAX | SALIS RIP | | |
| | HOT SPRIMS Total | - 121100 | 1,035:46 | 97.33 | | | |
| + [E] | THIOEND Total | | 3,410,96 | 204.66 | | | |
| * E | SCOTTSDALE TODAL | | 1,756.81 | 1155 41 | | | |
| • <u>70</u> | TUESEIN Total | | 1,791.95 | 107.52 | | | |
| - H | a star a se propi | AZ Intal | 8,615,70 | 916,91 | | | |
| • 13 | Go To Special | 100 | 1/027/79 | 109.67 | | | |
| · 15 | and the local days in the local days in the | | 7'994'34 | 111.86 | | | |
| * 17 • 19 | Dent - | The second second | 3,901.63 | 114,10 | | | |
| + 19 | | Mandos | 2,929.66 | 116.33 | | | |
| • 21 | | ndlamor. | 1,978-46 | 118.71 | | | |
| · · · · · | Citration Citrate | | 3,058.38 | 122550 | | | |
| (*) (125) | Claw | Contract of Contraction | 2,018.09 | 121/08 | | | |
| • 2/ | | | 2,099.55 | 125.97 | | | |
| • 3 | Constant States | in second se | 2,141.55 | 126.45 | | | |
| • 37 | There are a second s | 4 | 2,194.39 | 131.06 | | | |
| 1 1 | Titleran 19 Notice | upin orde | 3,229.06 | 136.36 | | | |
| * 3 | | Apres Assessed in | 2,318.09 | 136.30 | | | |
| • 30 | C Gamma gray Dibuba | | 2,364,44 | 141.07 | | | |
| • 31 | Cicberts | page 1 | 2.411.73 | (44,70) | | | |
| · · | r (Chette | 100 | 85,945.71 | 5,216.74 | | | |
| 1 71 | and the second sec | The second second | 4.199.00 | 251.93 | | | |
| • 77 | OK I | Date | 4,545.00 | 272.70 | | | |
| 4 75 | URANEEVALE TOTAL | | 4,282.85 | 296.97 | | | |
| * 75 | DRINDA Total | | 4,368.51 | 282.11 | | | |
| • 79 | PLEASANT HILL Total | | 4,455.88 | 267.35 | | | |
| • 81 | PORT HURNENE Total | | 4,635.90 | 276.15 | | | |
| (*) 89 | ROLLING HELS ESTATE 1 | int all | 4,729.82 | 28(0.72 | | | |
| · 15 | SAN CARLOS Intal | 1010 | 4,823.19 | 289.39 | | | |
| ÷ 87 | SAN DEGO Total | | 4,919.65 | , 295.18 | | | |
| • 92 | SAN FRANCISCO Total | | 30,682,43 | 1,240,95 | | | |
| • 94 | SAN JUSE Intal | | 164,987.80 | 9,899.27 | | | |
| Customer List A / Customer List 0 | SAN MADD Intal | | 9 491 70 4 491 70 | 125.91 | | | |

Figure 11-7: The Go To Special dialog box

| Subtotal | × |
|---|----------|
| At each change in: | |
| CITY | ~ |
| Use function: | |
| Sum | ~ |
| Add subtotal to: | |
| | ^ |
| STATE SALES | ~ |
| Replace gurrent sub Page break between Summary below dat Remove All | n groups |

Figure 11-8: Remove subtotals from the database

Use AutoOutline

 Choose Data Croup and Outline AutoOutline. Figure 11-9 illustrates a worksheet with outline headings for both rows and columns. Row outline symbols are on the left, and column outline symbols are at the top of the worksheet.



AutoOutline works best if the worksheet has summary formulas that reference cells in the detail cells. The summary formulas must be adjacent to the detail.



AutoOutline assumes your summary rows are below the detail rows or to the right of the detail columns. If your worksheet summary rows are above or to the left of the detail, choose Data=>Group and Outline=>Settings and uncheck the Summary Rows Below Detail check box and/or the Summary Columns to Right of Detail option.



You can create and apply styles to an outline, or you can apply AutoFormats to an outline. You can apply the formatting either before or after you create the outline. See Chapter 4. To apply an automatic style, choose Data=>Group and Outline=>Settings and select the Automatic Styles check box.

- **2.** To expand the outline, click the Show Detail buttons to the left of the rows or above the column headings. (See Figure 11-10.)
- **3.** To collapse the outline, click the Hide buttons to the left of the rows or above the column headings.
- **4.** To remove the AutoOutline, choose Data=>Group and Outline=>Clear Outline.



114

To hide an outline without removing it, display all the data by clicking the highest number in the outline symbols and then choosing Tools= Options. Click the View tab and clear the Outline Symbols check box.

| -05 | | | and the second se | New York, Name and Address of the Owner, or other | and the second second | · | | | | |
|------------|--------------------|------------|---|---|-----------------------|-------------|-------------|-------------|-----------------|------------|
| | · A 7884 | 35 | _ | | | | | | | |
| 2 | 1 | | | - | | | | - | | - |
| a | | в | 6 | 0.1 | | | 0 1 | н | 1 1 | 2 |
| 100 | | January | February | March | TOTAL OF | April | May | June | TOTAL OF | July |
| 131 | Berts | 31 574 55 | 34,819.90 | 34 123 40 | 102618.3436 | 35,864,50 | 35,147.21 | 29 875 12 | 100880.8051 | 25,991 3 |
| 211 | Ceramics | 17,200.44 | 11.50 29 | 11,349,63 | 34138 32432 | 11,928.69 | 11,690,12 | 9,936,60 | 30860 41201 | 0.644.0 |
| 1 | Ensprent | 72 268 77 | 74 736 94 | 78,232,40 | 200029 1165 | 76,966.75 | 75,425.35 | 64.414.97 | 210513 098 | 66,750.0 |
| | Hand Toole | 7.635.00 | 785425 | 7.736.57 | 23235.978 | 8.120.78 | 7,669.38 | 5.764.61 | 22843 74711 | 5,885.2 |
| 0 | Total Index | 124170.18 | 129012 3454 | 120432 0985 | 380214 604 | 102062 7158 | 130225-0616 | 110001 3023 | ardina anticite | 96001-4029 |
| | Landscape Services | 32,069 53 | 33.148.55 | 32,486,56 | 97099 (54600 | 34,144.04 | 39,461.18 | 28,441.99 | 90047 18632 | 24,748.5 |
| | Funnum | 16,372,42 | 10.997.00 | 16:517:14 | 56886 64291 | 19,986.99 | 19,175.65 | 16,299.31 | 86841 98623 | 14,180.4 |
| | Nuriery. | TE 199 96 | 18.818.78 | 18,442.45 | 55451 18300 | 19,383.34 | 18,995 68 | 16,148.32 | 54525.34301 | 14 (547 30 |
| 11 | Trile! Cuisse= | 68,637,03 | 70.985-42 | 60,645.11 | 200143.4529 | 73.094.39 | 71,632.40 | 60,897.62 | 205 67 6 49 | 52.0722 |
| 13 14 16 H | Grand Total | 193,402,89 | 199,977.76 | 195,978.21 | 589,358.06 | 205,977.05 | 201,857.55 | 171,578.92 | 579,413,57 | 149,273.6 |
| 1/ | | | | | | | | | | |
| 中国市政司政制制局中 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 124 | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 189 | | | | | | | | | | |
| | | | | | | | | | | |

Figure 11-9: A worksheet with outline headings

| 1000 | Edit View Ins | A CONTRACT OF THE OWNER | and the second second | | | | | | | fir finit 🔸 | - 6 |
|-------------------------------|--------------------|---|-------------------------|-------------|-------------|--------------|----------|------|----|-------------|-----|
| 3,6 | | 7 4 A 4 2 | | | | 3 109% ÷ | | | | | |
| 05 | | B / U II 1 884.25 | 1 11 21 3 | M 1, 2 2 | 0. 0 | 0 · A · | | | | | |
| -5- | ~ A 7 | 684.20 | _ | | | | | | | | - |
| 8 | | | | * | • | | | | | | |
| 601 | A | EI | 1 | M | a | | E | τ. υ | v. | W: | |
| 111 | +510.1 | 107AL Q1 380214 604 | 101AL Q2 373794 0706 | JOTAL QU | | RAND TOTAL | | _ | | | - |
| 3 | Total Indoo | 300274 004 | 2120/04 0100 | 381514 8413 | 421104 4001 | 1,573.018.08 | | | | | |
| ŤŤ. | Total Dutdoor | 209143-4529 | 200,014 49. | 215,184.37 | 235,312-50 | 865,265.11 | | | | | |
| 12 | Granit Total | 589,358,06 | 579,413,57 | 606,409,32 | 663,102,26 | 2,430,283.19 | | | | | |
| 14 | Channe Forth | 365,236,26 | 313,413,31 | 004,445.34 | 063,102.20 | 2,430,203.13 | | | | | |
| 15 | | | | | | | | | | | |
| 10711日初日二四月二百万四月日日日日日日日 日本 5日 | | - | | | | | | | | | |
| 16 | | | | | | | | | | | |
| .19 | | | | | | | | | | | |
| | | - | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | | - | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 25 | | _ | | | | | | | | | |
| 27 | | | | | | | | | | | |
| 29 | | | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 쾻 | | | | | | | | | | | |
| 33 | | | | | | | | | | | |
| 34 | | | | | | | | | | | |
| 35 | | - | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 31 | | | | | | 14-14 | | | | | |
| 1. 10/ | Sheet 1 / Annets / | Steet3 / | | | | 141 | | | | | |

Figure 11-10: Click the plus or minus buttons to hide or display parts of the workbook

Form an Outline Group

- 1. Highlight the rows or columns that you want to group together.
- **2.** Choose Datator Group and Outlineto Group. In Figure 11-11, you see where all the vehicles in the asset list are grouped together.



Click the Hide or Show Detail buttons to hide or display the group detail.

3. Repeat Steps 1 and 2 until you have created all the levels you want in the outline.

Remove Items from a Group

- 1. Select the rows or columns you want to remove from the group. If you want to remove an entire group, select all the rows or columns in the group.
- 2. Choose Data⇔Group and Outline⇔Ungroup. Excel removes the rows or columns from the group and if the rows or columns you delete are in the middle of a group, Excel breaks the group into two smaller groups. See Figure 11-12, where the vehicles are broken from one group into two smaller groups.



Optionally, ungroup sections by holding the Shift key, clicking the Hide or Display buttons, and then choosing Data=>Group and Outline=> Ungroup. Excel does not delete any data when you remove items from a group.

| Ally | × 10 × B / U ■ ■ | #田本生 1日 | 出现建 | A- | | | | |
|------|---|---------|-----|-----|---|---|---|-----|
| AtE | Pre topor being start and | | - | | | | | |
| 114 | A | B | C. | D | E | P | Ğ | H · |
| 1 | ASSET ALLOCA | TIONS | | | | | | |
| 2 | | | | | | | | |
| 3 | A CONTRACTOR OF | VALUE | | | | | | |
| .4 | Desks | 11,200 | | | | | | |
| | Chairs | 1,475 | | | | | | |
| E. | File Cabinets = 2 drawer | 874 | | | | | | |
| 7 | File Cabinets - 4 drawer | 1,362 | | | | | | |
| 8 | File Cabinets - lateral | 973 | | | | | | |
| 9 | Storage cabinets | 1,806 | | | | | | |
| | Computers | 12,640 | | | | | | |
| 11 | Telephones | 72 270 | | | | | | |
| 12 | Fax Machining | 7,825 | | | | | | |
| 13 | Copiers | 5,632 | | | | | | |
| 14 | Calculators | 1.235 | | | | | | |
| 15 | Lights | 641 | | | | | | |
| 10 | 2003 Blue Chevy vari | 38,694 | | | | | | |
| × 12 | 2005.Green Chevy pickus | 29,410 | | | | | | |
| - 18 | 2002 Blue Ford pickup | 26,877 | | | | | | |
| - 19 | 2000 White Ford pickup | 24,345 | | | | | | |
| > 20 | 2005 Gold Toyota SUV | 34,576 | | | | | | |
| 21 | TOTALS | 281,634 | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |
| 25 | | | | | | | | |
| 26 | | | | | | | | |
| | Sheets Anarts (Spoets / | | | ter | | | | 34 |

Figure 11-11: Create a manual group

| Au | A16 | • 10 • 10 / 10 11 11 | ····································· | 2.2.2 | a.4-1 | | | | |
|----|----------|---------------------------|---------------------------------------|-------|-------|---|---|---|-----|
| 12 | | | B | C | D | E | ۴ | G | I H |
| | 1 | ASSET ALLOCA | TIONS | | | | | | |
| | ż | | | | | | | | |
| | 3 4 | | VALUE | | | | | | |
| | 4 | Desks | 11,200 | | | | | | |
| | 5 | Chairs | 1,475 | | | | | | |
| | Đ. | File Cabinets = 2 drawer | 874 | | | | | | |
| | 7 | File Cabinets - 4 drawer | 1,362 | | | | | | |
| | 8 | File Cabinets - lateral | 973 | | | | | | |
| | | Storage cabinets | 1,606 | | | | | | |
| | | Computers | 12,640 | | | | | | |
| | | Telephones | 72,270 | | | | | | |
| | 12 | Fax Machines | 7.825 | | | | | | |
| | 13 | Copiers | 5,632 | | | | | | |
| | 14. | Calculators | 1,235 | | | | | | |
| | 15 | | 641 | | | | | | |
| | | 2003 Blue Chevy van | 38.694 | | | | | | |
| Ľ. | | 2005 Green Chevy pickts | 29,410 | | | | | | _ |
| 0 | 18 | | 26,817 | | | | | | |
| 51 | | 2000 White Ford pickup | 24,345 | | | | | | |
| | 20 | 2005 Gold Toyota SUV | 34 576 | | | | | | |
| | 21 22 | TOTALS | 261.634 | | | | | | |
| | 23 | | | | | | | | |
| | 24 | | | | | | | | |
| | 23 24 25 | | | | | | | | |
| | 26 | | | | | | | | |
| 1 | | Scients Assets (Scients / | | | 141 | | | | - |

Figure 11-12: Splitting up groups



Filtering Data

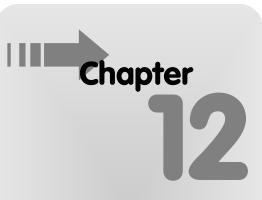
A fter you create an Excel database and assemble a large amount of data, you'll probably want to analyze it. You may want to ask yourself questions about your data such as "Who are my best customers?", "Which inventory items are provided by a specific supplier and cost less than a certain amount?", or "Which employees work the least amount of hours?" Excel includes several tools you can use to study your data so you can make better decisions.

This chapter is about filtering, where Excel pulls out specific records for review, providing you an easy way to break your data into smaller more manageable chunks. Filtering does not rearrange your data; it simply temporarily hides records you don't want to review, so you can clearly examine those you do.

You can create your database by just typing in the Excel screen, or you can use an Excel data entry screen. In the first section, you see how to create a data entry screen for assistance in creating your database. But, remember, you don't have to use the data entry screen to use the filtering.

The remainder of the chapter is devoted to the different ways you can filter your data including

- ➡ Using AutoFilter, which allows you to select key pieces of data.
- Selecting records by more than one condition.
- → Displaying only the top *x* number of records.
- Multiple filtering where you locate records that either match all criteria, or belong to one or the other criteria.
- Advanced filtering where you designate a specific area of your worksheet to manage your criteria selections.



Get ready to. . .

| ➡ Create a Data Entry Screen | .118 |
|-------------------------------|------|
| 🖚 Filter Data with AutoFilter | .119 |
| | .120 |
| ➡ Select Only the Top 10 | .121 |
| 🗝 Customize an AutoFilter | .122 |
| ➡ Find Multiple Criteria | .123 |
| ➡ Use Advanced Filtering | .124 |

Create a Data Entry Screen

1. Enter the column headings for your database. When you create the data entry screen, the column headings appear as field names.



For faster data entry, format any numerical columns with the desired number format. Then, when you use the data entry screen, you need to enter only the raw numbers without commas or dollar signs.

- 2. Click in any heading cell; then choose Data +> Form.
- **3.** Click OK at the message box that appears. Excel displays a data form with the headings shown as field names (see Figure 12-1). Each label has a blank field to enter the data.



If you already have data entered into your database, Excel does not display the message box.



Using a data form makes data entry easier than typing across the columns when you have a wide range with more columns than can fit on the screen at one time.

4. Enter the first record information, pressing the Tab key to move from field to field (see Figure 12-2).



118

Press Shift+Tab key to move back to the previous field.

- *5.* Click the New button. Excel adds the record to the database and displays another blank screen ready for the next record.
- 6. Click Close when you finish entering data. Reopen the database form at any time by choosing Datar⇒Form.

| ct • 6 | STATE | | 3 | | | | |
|----------------------|---|--|------------|--|----------------|---|-----|
| A DISTOMER | E | STAIL | D SALES | TAX | F SALES REP | 5 | 11 |
| | | | | | 1000 | | |
| 1 | | Sheetf | 1 | 0 | | | |
| | | | | | | | |
| | | CLISTOPHE: | n Merrin | | | | |
| | | CD141 | in the | | | | |
| 6 | | STATE | | and a second | | | |
| 2 | | 2815 | | | | | |
| 3 | | IAL | Fedde | - | | | |
| 4 | | SALESHEP | Fedda | | | | |
| 6 | | and the state of t | | Private Contraction of Contraction o | | | |
| 7 | | | Qter | 94 | | | |
| 9. | | | Des | | | | |
| 3 | | | | 100 | | | |
| 2 | | | | | | | |
| 24 22 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 8 | | | | | | - | |
| 9 | | | | | | | |
| 0 | | | | | | | |
| 1 | | | | | | - | |
| 0 | | | | | | | |
| 4 . K Sheet3 / Sheet | A Property of the second se | | 14 | | | | 1.5 |

Figure 12-1: Create a data form

| CI · A STATE | 「日田をたい」はは | | 6 | | | |
|---|--|------------------------|-------------------|---------------------------|---|------|
| A E DISTOMER CITY ALL BUSINESS SERVICINDIANAPOLIS | STAIR 1 | D SALUS NUMI (D) | E TAX 1.530 | F SALIS RIP ID FORD | 6 | . 11 |
| | Sheet CUDONS PLACEMENT (The According DATE GA Salits entry LAS 2006 Salits for North Salits entry | | | | | |
| + + +\thet1/pret2/freet0/. | | la: | | | | 13 |

Figure 12-2: Enter database records with a form

Filter Data with AutoFilter

- 1. After clicking anywhere in your database, choose Data⇔Filter⇔AutoFilter. Excel displays an arrow in each database column.
- **2.** Click the arrow in the column heading. Excel displays a drop-down list, which includes one of each unique entry (up to 1000 entries) in the selected column. See Figure 12-3. Besides the option of finding an exact match, the choices include
 - Top 10: Displays the 10 most (or least) repeated items. See the "Select Only the Top 10" section.
 - **Custom:** Prompts you to customize the filter. See the "Customize an AutoFilter" section.
 - **Blanks:** Displays all records with a blank in the selected field.
 - NonBlanks: Displays all records with data in the selected field. This hides the blank records.
 - All: Redisplays the entire list.



Press Alt+Down Arrow while in any column to display the AutoFilter list for the current column.

- **3.** Click the entry you want to filter. Excel displays only the records that match your choice. In Figure 12-4, for example, you see only the customers from Cincinnati.
- 4. Choose Data=>Filter=>Show All to redisplay all entries.



Optionally, click the AutoFilter arrow from the filtered column and choose (All).

5. When you finish filtering your data, choose Data ⇒ Filter AutoFilter to turn off the AutoFilter.

| Elle Edit View Insett Form | at Tools Data Window He | | | | | | iii/iiy fini | · - 0 |
|--|-------------------------------|--------|---------------|--------------|----------------|---|--------------|-------|
| 13939393274 | | | A HE HARD & A | 14 | | | | |
| Talcane - 10 - B / U | # # # 3 \$ 5. 1 12. | 出现课 | A-1 | | | | | |
| BI · A CITY | | | | | | | | |
| CUSION R | In CITY In | STATI- | SALLS I- | IAX + | SALIS RIT- | 5 | 11 | 1 |
| ALL BASILES SPACE | 17 (20) | - Bi | 2534120 | 1,53100 | FORD | | | |
| PSACHTREE ENTERPRISES | (Tep 10 _1 | GA | <5,763.00 | 5,745.00 | BLETING: | | | |
| 47TH ST. MATTING CORP. | (Ciamini,) | 111 | 2,080.12 | 179,29 | IN ALL DAYS | | | |
| A.W. IMPORTS | AITEN AITEN | - 24 | 196.67 | 11.80 | NCERSON | | | |
| E AR ADES RAC | ALCENTSON | FA | 2,970,89 | 179.45 | PMOXETT | | | |
| Z ARTH & SALCO | ADJOURNOUT | 74 | 174.54 | 10.40 | PRIMITY | | | |
| AUTADEDOIS. PC | AL 204 | R | 3,637.45 | 212.25 | ANDER | | | |
| 9 HALLES MECHANICAL INC. | 4494,8151 (J)(2)(5)()() | E. | 5.694.07 | 141.64 | RICHER | | | |
| D (ALLMR | 4783210 | 1.00 | 3,608,20 | 216.49 | HIDETT | | | |
| I LAME | 4N/730CH | 1 | 1.976.52 | 118.79 | 1.807970 | | | |
| 7 ARAD CORPORATION | AbitA | N. | 5,807.95 | 110.59 | FIRD | | | |
| I AMERICAMENTS GROUP | AFICADÓA ARIENSTON | - 24 | | 123.38 | DAVIS | | | |
| | ATLANTA | | 2,056.37 | | | | | |
| A AQUITY OFFICE PROPERTIES | ALRICHA | 24 | 2,097.50 | £25.85 | AMERICA | | | |
| 5 ATARATY PEARSY | ALIETZI | - R. | 3,681.36 | \$50.405 | DAME | | | |
| S ALRO FURNITURE CORP | AVON DAGEDNE DENE M | 74 | 3,050.71 | 183.04 | DAVIS | | | |
| Z AVA 3 LFELA,) TD. | Contraction of the local data | F2. | 877.±0 | 52.95 | PORD | | | |
| S AVACUITIVA CONFIRMETION | 61UANTA | 274 | 3,997.92 | 216,27 | DWGS | | | |
| B AXPRESS PACKING | APCADIA | - 24 | 5,924.11 | 35.45 | XNES | | | |
| E. H. MEATECONFUNCTIONE. | LAS VIDAS | 124 | 2,020.53 | 175.77 | LOWE . | | | |
| BAARS CONSTRUCTION CO | BOCA RATON | R. | 8,454,70 | \$07,28 | J.MTPLE | | | |
| BACK CO. | HOUSTEIN | TE | 5,417.59 | 325.06 | TACKEELY | | | |
| EL BAJUCHEMP & CO. PAPERS. INC. | INDER FLAD | 747 | 2,411.30 | \$47.00 | XNES | | | |
| A BALANKA LICRP. | BOVITON | R | 3,077.56 | 194.77 | DAVIS | | | |
| S BALANKA PAPEPIS | BRANDON | - FL | 3141.16 | 130 47 | 3,419154 | | | |
| 5 BARCO COMPANY | CLEURWATER | 16 | 194.37 | 47.40 | KINES | | | |
| BARMIC PRARRY CANTRA | CLEARWATER: COMMPRY | R | 0,394.67 | 560.08 | A A G FT B A A | | | |
| S INDICO CONSTRUCTION, INC. | 1675, AMETA | GA . | 2,408.58 | 000.12 | AND/REDON | | | |
| 9 bits/ cosicies by: | HACKENEACH | 345 | 851,45 | 51.09 | MONROV | | | |
| O REGINTER WORLD | PRESENT | TA . | 2.016.09 | 17108 | POPUL | | | |
| I BEIGNES | ALBLICKERCLE | 101 | 2,950.23 | 150.00 | WALK | | | |
| 2 BESIZIE & SONS | CLEVELAND | OH | 61,833.51 | 3,710.01 | S. STUDIO | | | |
| BLICK-BOX PIPARRY | 4-RUOUERCUE | 223 | 2,706.43 | 157.39 | 30465 | | | |
| 4 INCLUMES CONSTRUCTION | Ch EARWATTER | - Cen | 175,096.36 | 10.505.18 | WALKER | | | |
| Kastomer List A / Customer I | | 10 | Is. | 1.10.000.000 | treasure. | | | - 341 |
| A REAL PROPERTY AND A REAL | 004003042 | | | | | | | 1000 |

Figure 12-3: AutoFilter selections

| S Microsoft Excel Contomer test | I Tools Data Window | r Holo | | | | | dir Imi | |
|---|---|--|---|--|--|---|---------|------|
| | and the second se | B. E - 11 (1) | | 1. | | | | |
| | # 10 m + 3 m | | | | | | | |
| BI - A CITY | | | | | | | | |
| CRATTVA PPAPRY DESCRESS 25 BOWAH CONSTRUCTION 67 CRATTVA PPAPRY DESCRESS 820 LINEY PK 221 MOSAA CORPORATION 221 MOSAA CORPORATION 221 MOSAA CORPANY, MC | B CINCINATI CINCINATI CINCINATI CINCINATI CINCINATI | + STATI+ DH DH DH DH DH OH | D SALES + 178,528.04.52 59,9422.44 57,124.61 36,257,10 | TAX + 10,715.29 3.360.27 3.565.95 3.427.48 3.406.03 | SALLS RUC+ MODESCH SMITHERS SMITHERS SMITHERS SMITHERS SMITHERS MICREWS | 6 | н | 1 |
| TEADING CORP. | CIVERNATE | DH DH | 53,029,79 55,774,31 | 3,229,79 3,166.40 | HIOLETT MOREEN | | | |
| 444 346 346 347 349 349 349 349 349 349 341 341 341 343 344 344 344 344 344 344 | | | | | | | | |
| 44 57 60 69 60 | | | | | | | | |
| 61 67 69 | | | | | | | | |
| 65 67 67 | | | | | | | | |
| Draw - AutoShapes | | 2.4.= | Euul | | | | NOT IAM | (34) |

Figure 12-4: Filter by city

Perform a Secondary Filter Selection

- 1. Turn on the AutoFilter by choosing Data=>Filter=>AutoFilter.
- **2.** Click the column arrow by which you want to first filter data.
- **3.** Choose the data you want to filter. In Figure 12-5, you see selections only containing the city of Atlanta. However, notice that there is an Atlanta in GA, IN, and SC.
- **4.** To further isolate specific items, click the AutoFilter arrow at the top of another column.
- *5.* Select the field by which you want to perform the second filter. In Figure 12-6, the primary option was by the city of Atlanta, but I apply the state of GA to the secondary filter.
- **6.** Repeat Steps 4 and 5 to further filter by additional fields as many times as you need.
- **7.** When you're done looking at your filtered data, choose one of these options:
 - **Return to the first filter:** Click the second filter column arrow and choose a different second filter.
 - **Return to the first filter only:** Click the second filter column arrow and choose Show All.
 - Return to viewing all records: Choose Data=>Filter=> Show All.



Optionally, click the AutoFilter arrow from the filtered column and choose (All).

| Microsoft Eccal - Customer fest | | | | | | | | 2/4/ |
|--------------------------------------|---|---|---------------|-----------|------------|---------|------------|------|
| Eile Leit View Insert Form- | at Touls Data V | Yindow Help | | | | 100.000 | COLUMN TWO | 4 |
| 1243432744 | 3 - 3 41 - | | WHENDRY E | 6.2 | | | | |
| Falcane = 10 = 1 B / U | 11 11 11 11 1 | 法,1,11,21,11,11,11,11,11,11,11,11,11,11,1 | _ · · · A ·] | 100 | | | | |
| C13 - A 04 | | | | | | - | | |
| 1 CUSTOMUS | - I-I CI | | SALES I+ | IAX - | SALIS RIE- | 6 | -11 | 1 |
| LEWNELPHANTS DOXP | STLANTA | 21 | 2,056.37 | 123.38 | DAVIS | | | |
| 14 AOUTY OFFICE PROPERTIES | ATLANTA | 21 | 2,007.50 | 125.85 | J. A OPER | | | |
| 19 AKACUTIVA CONSTRUCTION | ATLANTA. | 71 | 1,037,77 | 116.27 | DAVTS | | | |
| 28 BIBCO CONSTRUCTION, INC. | ATLANTA | 174 | 1,468.50 | 88.11 | ALCENCO! | | | |
| EL CORPORITA VISION INTERIOR | ATLANTA | 50 | 1,527,50 | 91.68 | REPAILING: | | | |
| IS COSMOPOLITIN HOW IS TRUST | ATLANTO | i Cat | 1.5290.47 | 91.51 | PRATT | | | |
| A DA STAFDIO + PARTVERS | ATLANTA | 64 | 2,086,04 | 201222 | FRAM | | | |
| 75 DATE INC | en.exta | iGA. | 2,793,20 | 207.41 | HACKETT | | | |
| ED DESIGN CONCAPT BUTS | ATLANTA | Gá | 1,755.09 | 3/5.31 | ROFF | | | |
| BA LESIGN OWN INTERIORS | ATLANTA | 124 | 1,720.66 | 2112,24 | WALL FER | | | |
| BT DEACHING HARMES INC. | 675.65(16 | 21 | 2,025,00 | 20556 | DAVE | | | |
| 0 DMS | ATLANTA | 21 | 3,621,44 | 97.29 | 3.FOPER | | | |
| 97 CR. ARXI WAR ASTAIN | ATLANTA | GA . | 2.016.05 | 101106 | HACKETT | | | |
| 99 DLEA WARES CORSTRUCTION | 1011.00114 | 154 | 2,005 77 | 11330 | HIGHT | | | |
| DE FARWAY HOSPITAL | ATLANTA | - 24 | 16,287.56 | in 397.25 | Dalvigs | | | |
| DEPOPPART CONSTRUCTION CROAP | STANTS | Gal | 2,139.46 | \$29.37 | PROFIT | | | |
| 23 FRADRICKICN / KR3 INC. | ATLANTA | 24 | 2, 162, 10 | 141.70 | RICHE | | | |
| 20 PRIMA'L MALASSOCIATES | ATLANTA | 21 | 2,225,88 | 831.65 | 1.6.07670 | | | |
| 25 PRIMILIN FORK SCHOOL DEST #84 | ATLANTA | Ga | 2,270.40 | 136.20 | HACKETT | | | |
| OFRISAR CONSTRUCTION INC. | ATLANTA | 71 | 2,315.81 | 18.75 | DAVIS | | | |
| AS GRONAR CIRTON & DOUGLIS | ATLANTA | 124 | 2,409.37 | 144.56 | PRUTT | | | |
| ELCOLD & CO | ATLANIA | Ga | 2.500.71 | 250.43 | BLAIRDAN. | | | |
| CAPTING MARK, STAFHANS | ATLANTA | 154 | 2,607.98 | 115.48 | IR CITER | | | |
| GRAMM/THOMES IRCHITACES | ATLANTA | 21 | 2,556,91 | 151.41 | DAVIS | | | |
| BE GLOWLIND DESIGN INC. | ATUNITA | Ga | 182, 199, 87 | 10,000,50 | WHENE WAT | | | |
| THANKY BROS CONSTRUCTION | ATLATA | Tak. | 1.341.56 | 81.45 | FOWMPDS | | | |
| TEHRICLE CONTESTORS 24 | 6TLAMER | ital. | 2,660.14 | 299.55 | INUITT | | | |
| POTUTE CONTRACT | ATLANCA. | Gal | 2,715,34 | 167.00 | APERTAN. | | | |
| UT HOOD SERVICES OF INCIANA | ATLANTA | 64 | B 633.32 | 517.62 | RENOL | | | |
| HE ICIDAMY O GAMARE DANTIST | ATLANTA | CA | 3,653,87 | 99.21 | SA STATUT | | | |
| 27 a. TRAIBAR ASSOCIATES | ATLANTA | Ga | 1,411.56 | 84.69 | PRUTT | | | |
| THE DES COMMANCE INTERIOR | ATLANTA | 71 | 2,439,79 | 95,39 | DANCE | | | |
| TRANSPORT CALL PROPERTY | an Mara | 174 | 1,495.79 | 00.70 | HAPPETT | | | |
| + + + + Customer List A / Customer I | | 100 | 1 al | | - De sert | | | 3.1 |
| Draw- AutoShapes- > > | COMPANY AND | 1.60.000.0000 | 1 at 10 at 10 | | | | | |
| Diaw. AutoStapes | | | | | | | | |

Figure 12-5: Select the first filter

| S Microsoft Escal - Customer Inst | | | | | | | 32/26 |
|------------------------------------|----------------------|---|---------------|-----------|------------|-------------------|-------|
| Elle Leit View Insert Form | a free free free | And a second | 1 | - | | the second second | |
| 124714721 | | and the second se | 1115 10m + - | 14 | | | |
| Talcane - 10 - B / U | # # # 3 * 5 | 1.11日日開建 | _ · · · 4 · 1 | 100 | | | |
| 213 × 6.04 | | | | | | | |
| 1 CUSTOMOR | B CITY | - SIAU- | SALES I- | IAX + | SALES RIT- | 5 H | 1 1 3 |
| LITANECIMANTS CEOLP | ATLANTA | Set Avendrig | 2,056,37 | 123.38 | DAVIS | | |
| 14 AOUTY OFFICE PROPERTIES | ATLANTA | Sort Descendena | 2,097,50 | 125.65 | LAIPER | | |
| 18 AKAOJITIVA CONSTRUCTION | aTLANTA | | 1,037,77 | 116.27 | DAVES | | |
| 29 BIBCO CONSTRUCTION, INC. | ATLANTA | (AR) (Tan in) | 1,468.58 | 110.47 | MCGROCHI | | |
| | | (Cob0iii) | | | | | |
| EE CORPORITA VESION INTERIOR | ATLANTA | - CA- | 1,527.80 | 91.88 | ROBANG | | |
| COSMOPOLITIN HIM & TRUST | ATLANTA | 100 102 | 1,550,47 | 91.53 | PRATT | | |
| TA DA STAFDIO + NARTNERS | ATLANTA | 2 | 1,086.04 | 101.22 | FRAME | | |
| 15 DASH BAC | ATLANTA | iga. | 2,295.20 | 207,43 | +6ACKETT | | |
| DESIGN CONCAPT INTI. | ATLANTA. | GL | 1,725.09 | 3/5.31 | ROP | | |
| BA LESKIN ONA INTERIORS | ATLANTA | 15A | 1,720.60 | 203.24 | WALKER. | | |
| 87 DEMONINADARS, INC. | ATLANTA | 24 | 3,005.00 | 20556 | DAVES | | |
| 30 DIVIS | ATLANTA | | 3,621,44 | 97.29 | 3.JA(PER | | |
| 97 ER. ARICI WAR ASTAIN | ATLAUTA | 15A | 2,015.05 | 621156 | HACKETT | | |
| 99 DURA WARKS CORSTRUCTION | ATL6667.0 | 154 | 2,899,77 | 113.99 | TREAM | | |
| DE FAIRWAY HOSPITAL | ATLANTA | - 24 | 166,287.56 | 10,097.25 | DAVIS | | |
| 20 FORRAGT CONSTRUCTION CROUP | STANTS | Ga | 2,139.46 | 229.37 | PROJETT | | |
| 79 FRADRICKSCN / KR3 INC. | ATLANTA | CA. | 2,952,10 | 141.70 | RACES | | |
| 20 FRIM LYN ASSOCIATES | ATLANTA | 21 | 2,225.88 | 101.55 | J.J. FER | | |
| 129 PRIMILIN FORK SCHOOL DEST #04 | ATLANTA | Ga | 2,270.40 | 236.20 | HACKETT | | |
| O FRISAR CONSTRUCTION INC. | ATLANTA | 24 | 2,315.81 | 198.95 | DAVE | | |
| 45 GEONAR CIRTON & DOUGLIS | ATLANTA | 125 | 2,409.37 | 144.56 | PRUTT | | |
| SE GOLLE & CO. | ATLANIA | Ga | 2,500,71 | 250.43 | BLAIRDAG | | |
| STORFER MAK, STAFFANS | ATLANTA | 124 | 2,607.98 | 115.48 | IR CITE | | |
| GRAMM/THOMIS IRCHITACTS | ATLANTA | 21 | 2,556.94 | 151.41 | DAVIS | | |
| BE GROWLIND DESIGN, INC. | ATURITA | 54 | 162, 199, 07 | 10.00050 | where was | | |
| THARY BROS CONSTRUCTION | ATLAUTA | Tia. | 1.341.56 | ST 45 | EDWARDS | | |
| VEHENOLE CONTEXTORS 24 | ATLANTA | 154 | 2,500.14 | 299.67 | PROTT | | |
| | | | | | | | |
| BEHOPO STUDIOS | ATLANITA ATLANITA | Gal. EA | 2,715.34 | 162.00 | NEPENAL | | |
| BT HOOD SERVICES OF INCIANA | | | B(633.31 | 517.82 | BLENDIG | | |
| HE SCIDAMY O GANARD DANTIST | ATLANTA | iç4 | 3,653.87 | 99.25 | WINDAG | | |
| 227 IL TRAJBAR ASSOCIATES | ATLANTA | GA. | 3,411.56 | 94.69 | PRUTT | | |
| THE LPS COMMARCE INTERIOR | ATLANTA | 21 | 2,439.79 | 95.29 | DAWE | | |
| * * * * Customer List A / Customer | ATIM (Fa. | . 451 | 1.05.7 | .0175 | HAPPETT | | - 34 |
| | | | | | | | |
| Draw- AutoShapes- > - | 1221 4 12 (1121) | | 11 H H H H | | | | |
| Wine Minday | | | | | | 10005 14.84 | |

Figure 12-6: Select the second sort filter

Select Only the Top 10

- **1.** Turn on the AutoFilter by choosing Data⇔Filter↔ AutoFilter.
- **2.** Click the column arrow by which you want to filter data. This column must contain numeric data.
- **3.** Choose Top 10. The Top 10 AutoFilter dialog box appears, as shown in Figure 12-7.



Use the Top 10 AutoFilter to filter for the smallest or largest numbers.

- **4.** From the first option, select whether you want the top (highest) or bottom (lowest) values.
- 5. In the second option, select the number of items you want to see (from 1 to 500).
- **6.** In the third option, select whether you want to filter the items by their name or by their percentile. For example, choose to list the top 10 customers per their sales dollars, or list the top 10 percent of your customer base.
- **7.** Click OK. In Figure 12-8, you see the top 10 customers by their sales values, sorted by record number.

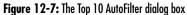


To return to the filter options, click the current filter column arrow and choose a different filter.

Click a Sort button on the Standard toolbar to sort the records by their value.

8. When you're ready to view all records, choose Data₅>Filter₅>Show All.

| ~ |
|---|
| |



| Microsoft Excal - Customer test | | | | | | | | |
|--|---------------|-------------|----------------|-----------|-------------|--------|-----------|-------|
| Eile Edit View Insett Formet | Tools Data 1 | Mindow Help | | | | 10.000 | 117 800 | · - 6 |
| 1343141744 | 41 | - 風工-好好) | A4143 100% 2 4 | 1.2 | | | | |
| Tafeaner - 10 - B / U | 三日三日 3 | 化十世出 建建 | A - | | | | | |
| D4 + & 2988.12 | | | | | | | | |
| | | 8 5 | D | E | - Same | 6 | 18 | 1 1 |
| 1 CUSTOMER | | TY + STAIL+ | SALIS - | | SALES REF.+ | | | |
| A BOULINGS DUNGTRUCTION | CLEARWATER | | 175,086.38 | 10,505,18 | WADLER | | | |
| BOWAN CONSTRUCTION | CINCINNATI | OH | 178,588.10 | 10,715,29 | ANDERSON | | | |
| OF FARINAY HOSPITAL | att.Antra | 21 | 156:207.56 | 10,097.25 | DAV75 | | | |
| CROWLIND DESIGN, INC. | ATLANTA. | TaA | 182,159,87 | 10,929.59 | ANDREWS | | | |
| B ARY'S CABINET CO. INC | TAMPAN | 21 | 189,519,12 | 11,371,15 | RUCCEN | | | |
| BE PAPP & MURD'T | 544,055 | Ca. | 164,907.00 | 9,899.27 | SMITHERS | | | |
| 17 ROOHA DIGWOSTIC | NOBLESVILLE | | 171,453.31 | 10,299.20 | XWES | | | |
| ES & & CONSTRUCTION COLLC | PENDLETON | 24 | 197,175.70 | 11,100.54 | LOWE | | | |
| AL SHURE TOOL SUPPLY | PLANFIELD | 71 | 105,003.06 | 11,145.18 | TWINK | | | |
| IB ZELINOW FIELDS | ATLANTA | E4 | 101,752.75 | 9,705.17 | FRANZ | | | |
| 43 | | | | | | | | |
| 44 | | | | | | | | |
| 46 | | | | | | | | |
| 街 | | | | | | | | |
| 42 | | | | | | | | |
| 49 | | | | | | | | |
| 49 | | | | | | | | |
| 50 | | | | | | | | |
| 51 | | | | | | | | |
| 62 | | | | | | | | |
| 53 | | | | | | | | |
| 54 | | | | | | | | |
| 58 | | | | | | | | |
| 66 | | | | | | | | |
| 57 | | | | | | | | |
| 60 | | | | | | | | |
| 69 | | | | | | | | |
| 60 | | | | | | | | |
| 61 | | | | | | | | |
| 67 | | | | | | | | |
| 63 | | | | | | | | |
| É4 | | | | | | | | |
| 66 | 200 | | 34-5 | | | | | 1414 |
| • • • • \Dastomer List A / Gatorier Li | | | 14. | | - | | | 21 |
| Draw- AutoShapes- > > = | 100 100 100 | 1 3+2+A+=1 | 164.98 | | | | | |
| Tol bit mercicland | | | | | | | clos land | |

Figure 12-8: Selecting the top 10



Customize an AutoFilter

- 1. Turn on the AutoFilter by choosing Data⇔Filter↔ AutoFilter.
- **2.** Click the column arrow by which you want to first filter data.
- **3.** Choose Custom. The Custom AutoFilter dialog box, shown in Figure 12-9, appears.



Use a Custom filter when you need to select a range of data instead of a single piece of data. For example, use the Custom filter when you want to find any value greater than a specified amount or where the data contain specific characters.

- **4.** Select a qualifier from the first drop-down list (see Figure 12-10):
 - Equal To and Does Not Equal
 - Greater Than and Less Than
 - Greater Than Or Equal To and Less Than Or Equal To
 - Begins With and Does Not Begin With
 - Ends With and Does Not End With
 - Contains and Does Not Contain



The qualifiers can apply to label or value cells.

5. Select a value to go with the qualifier from the second drop-down list or type a value in the text box.

6. Click OK. The filtered data now matches the data criteria.

| Custom AutoFilter | | × |
|--|---------------------|--------|
| Show rows where: SALES | | |
| equals | ▼ | × |
| ⊖ <u>A</u> nd (| ∋ ⊈r | |
| | ~ | ~ |
| Use ? to represent any s Use * to represent any s | eries of characters | |
| | | Cancel |

Figure 12-9: The Custom AutoFilter dialog box

| Custom AutoFilter | | | 6 |
|---|---|----|--------|
| Show rows where: SALES | | | |
| equals | ~ | | ~ |
| equals does not equal is greater than | ^ | | |
| is greater than or equal to is less than is less than or equal to | | | Y |
| Use ? to represent any single cha Use * to represent any series of | | ОК | Caprel |

Figure 12-10: Select a qualifier

Find Multiple Criteria

- **1.** Turn on the AutoFilter by choosing Data⇔Filter⇔ AutoFilter.
- **2.** Click the column arrow by which you want to first filter data.
- **3.** Choose Custom. The Customize AutoFilter dialog box appears.
- 4. Select the first qualifier from the first drop-down list.
- *5.* Select the second qualifier from the second drop-down list.



When using the AutoFilter, both qualifiers filter on the same field. For example, if the first qualifier filters on the Sales field, the second qualifier filters on the Sales field also. If you want to filter on two separate fields, such as Sales and State, then you must use the Advanced Filter. See the next section "Use Advanced Filtering."

- **6.** Select a matching option:
 - And: Your data must match both qualifications. In Figure 12-11, the Sales values must be greater than \$50,000 and be less than \$100,000. This allows the sale of \$61,833.51 (D32), but the sale of \$2,988.12 (D4) and \$175,086.38 (D34) would not be included.
 - Or: Your data must match only one of the two qualifications. For example, if the first qualifier specifies the sales value must be less than 50,000 or be greater than 100,000, then the sale of \$2,988.12 in cell D4, and the one of \$175,086.38 in D34 would be included in the filter, but the sale of \$61,833.51 in D32 would not be included.
- **7.** Click OK. In Figure 12-12, you see only records whose sales fall between the two values.



Figure 12-11: Select two qualifiers and a match option

| S Microsoft Eccal - Costomer test | | | | | - | | | ald. |
|---|-----------------|--|---------------|------------|------------|---|-------------|-------|
| Ella Edit View Insert Forma | | and the second s | 1 | - | | | inter and | · - 0 |
| 1343417414 | 1 | 医主-好好) | 1145 10m + | 14 | | | | |
| Talcane > 10 + B / U | | 100.00100.001 | - A . A . | | | | | |
| DA + A 288 12 | | | | | | | | |
| A | A A | E | 0 | 1 | 1 | 5 | 11 | 1 1 2 |
| 1 CINTOMER | - CITY | + STAIL+ | SALES - | TAX + | SALISRIE+ | | | |
| 12 BISKING & SCNS | (CLEVELAND) | DH | 61,833.51 | 3,710.01 | BLEPIPAG | | | |
| 50 CHIRLAS C. BRINDT CONST. | OHICAGO | L | 71,819.87 | 4,307,19 | WALKER | | | |
| 51 CHARON, CARGON METTLE PRIPER | CH0CaGO | R. | 73.2%.27 | 4,395.38 | ALEXPECT | | | |
| 54 CIRLING CORPORATION | ICH9CAGO | R. | 70,811.84 | 1,224.70 | JONES. | | | |
| 51 COMMUNITY BONK | 10436400 | L. | 76,215.82 | 4,572.98 | 1.0.09131 | | | |
| COMPUTER ROUTINES, DO. | icidicado | 0 | 27,140.34 | 4.664.41 | ROD | | | |
| U/ CRAETIVA FIPARRY DESIGNERS | CINCINATE | 094 | 56,004.52 | 3,360.27 | SNITHERS | | | |
| TE DACO ARROCIATES, INC. | 0400400 | L. | 79,294.84 | A,257.70 | LOWE | | | |
| ID DESIGN NEWSTRAIN, INC. | 042400 | 1. | 10.001.04 | 4,052.05 | MEMORY | | | |
| HS CESSOREDV PAC | JASPER | 24 | 52,498.46 | 8,0442.02 | FR.ENDIG | | | |
| SE DRACA CONSTRUCTERY MOMP CO | 040460 | £. | 64,248.47 | 5,048,92 | #4ACKETT | | | |
| IDT DUNLIP & COMPANY, INC. | CHICAGO | £ | 85,831.39 | 5,149.68 | FORD | | | |
| 19 FORMANA CREDIT UNION | CHICAGO COADIHO | E. | 87,546.02 | 5,252,98 | PRUTT | | | |
| 74 HIME YON CO COW VISIT NU | HR.NTDAGERG | 114 | 09,298.30 | 5,357,04 | WW/262 | | | |
| 75 HIMLTON COUNTY OCHMISS | OHEAGO | B | 812,084,96 | 5,465,10 | SMITHERS | | | |
| ER HORTMON | (3400460) | L. | \$2,925.56 | 5,574.40 | DAV075 | | | |
| 139 HORMASSTAR PARSICKEL PARENCE | CHOCAGO | £. | 52,316.00 | 3,199.01 | LOWI | | | |
| 190 HOMA META, SJ. DA C.V. | CLEVELAND | OH: | 10,021.09 | 3,637.27 | LOWE | | | |
| TE DSOLUTA, DC | 04CAG0 | b | 59,917.31 | 3,525,94 | HOWINPDS- | | | |
| 54 PLOUNA CRAB CRASS (ROWERS | WEERSON | 24 | 96,05129 | 5,799.01 | WALKER | | | |
| B7 WOLANAPOLIS MOTOR SPEEDWAY | INDIANAPOLIS | - 24 | 94,764.80 | 5,665.99 | XINES | | | |
| 59 INDER CERNATS COMPACTION | 0405800 | L | 00.593.29 | 5,915,60 | ALCORECCH. | | | |
| TALAS & LUNAS LIMITAD | OHICAGO | E. | 81,297.57 | 3,677.16 | NUCLEUR V | | | |
| ETD: INTHAM | CHICAGO | L | 42,578.57 | 3,791,41 | HADLETT | | | |
| FF GRTEIN + CAALS, BAC | 1046CAGO | <u>n</u> | 20,773.09 | 3,625,44 | PORD | | | |
| ZIM ESE - RECEALAN | (DRCAGO) | 1 | 10,049,47 | 3,902.97 | PRUTT | | | |
| THE SECTION AND INVALUES, INC. | CHOCAGO | K. | 10,331.40 | 3,5815.097 | 8961262 | | | |
| CASH AND THE REAL PROPERTY OF THE | (245450 | R | \$7,677.47 | 4.069.55 | INTHERS | | | |
| THIN AL BERDOCH. INC. | OHCAGO | L | 51,433.47 | 3,285,80 | FORD | | | |
| 22 XOHNE & TMON | 040400 | L | 60,095.66 | 1,005.74 | ICC108 | | | |
| 19 LI-BAV ANTAPPRISAS | CHICAGO | 1 | 55,519.10 | 3,331,15 | FRANZ | | | |
| DUMEY INC | CINCINIATE | CH- | 59,432,44 | 3.545.45 | X.MEPHER | | | |
| SERIE MAADOOD RECEILAY | 08'460 | 1 | -14.0m./p | 4.741 IP | DW/PS | | | |
| · · · · A Customer List A / Customer L | 110/ | | A.I. | | | _ | | |
| Draw- AutoShapes- > > | 03400435 | · | 0.01.01.02.02 | | | | | |
| and the second se | | and the second second | | | | | APR NAME | |
| in al fifth metrick for and | | | | | | | 10005 14.84 | |

Figure 12-12: Matching multiple criteria

Use Advanced Filtering

- 1. Make sure the AutoFilter is turned off.
- 2. Select the first four rows of the worksheet.
- **3.** Choose Insert Rows, which inserts the blank rows at the top of your worksheet. Excel uses these as your criteria range.



At least one blank row needs to separate your criteria range from your actual database. By inserting four rows, you are creating the opportunity to create three criteria options.

- **4.** Select the header row of your database.
- 5. Choose Edit Copy. A marquee appears.
- 6. Click the first cell of the first blank row.
- 7. Choose Edit Paste to copy the header row of your database to the first blank row (Row 1). You now have a criteria range ready to enter filter selections (see Figure 12-13).



While you could just retype the header row, using the copy and paste feature protects you against typing errors. The criteria area header row must exactly match the database header row.

- **8.** In the first blank row of the criteria range, enter the data you want to match. For example, if you want to locate any entries for the state of California, type **California** under the State heading.
- 9. Enter any additional filter criteria:
 - Create an And filter: If you want Excel to find data that meets more than one restriction, enter the desired additional criteria in another field on the first criteria row.
 - Create an Or filter: Enter the filter data on the second row of the criteria range. See Figure 12-14 where I've added data to both the State and Sales columns.

| S Microwell Eccel - Customer feet | at Tools Data Window H | elp | | | | The strength of the | |
|-----------------------------------|------------------------|-----------------------|------------------|----------|-------------|---------------------|-----|
| 10434417114 | 3-39-83 | E - 11 11 | Addies and a | 18. | | | |
| | | | | | | | |
| A2 - 5A | | and the second second | | | | | |
| | B. | C. | p | E | Land France | 5 N | 1 |
| CLESTOMER | CITY | STAT | SALLS | IAX | SALLS REP | | |
| 6 | | | | | | | |
| \$1 | | | | | | | |
| 5 CUSTOMER | CITY | STAIL | SALES | TAX | SALES REF | | |
| 6 ALL BUCKARDS SERVICE | PRODANAPOLES | 174 | 25,241,00 | 1,520,00 | FORD | | |
| 7 PEACHTREN INTERPRESS | NORCECIES | 124 | 45(753.00 | 5,741.00 | 机的内容 | | |
| # 47TH ST, MATTING CORP. | ALBERTSON | NY | 2,989,17 | 179,29 | BLEMMAG | | |
| B JAW, IMPORTS | ZICHPICVILLE | .24 | 196.57 | 11.00 | ALEXPECT | | |
| NI AR ALES, DAG | PHEADELFHEA | Pá | 2,990.89 | 179.45 | HACKETT | | |
| 11 AIRTH & SALCO. | ZICH/SVILLE | 21 | 174.64 | 10.48 | PRUTT | | |
| 2 AUTA DESIGNS, INC. | LIVE MARY | - FL | 1,637.45 | 212.25 | 11010 | | |
| 13 MILLIS MECHANICAL INC | WESTMONT | E. | 5,694.07 | 381.64 | RJOIER | | |
| 14 ALLMP. | LAUXER MEL | FL. | 3,608.20 | 216 49 | BADGETT | | |
| 15 AMC | GLEW/EW | E | 3,479.52 | 118.59 | 8,829539 | | |
| IE ANCASE CORPORATION | WORKSON | 24 | 5,807.95 | 348,48 | FORD | | |
| 17 AIMENONMULTS CHOLP | ATLANT6- | 34 | 2,056.37 | 123.30 | DAVES | | |
| 18 MONTY OFFICE HIOPHINIAS | ATUMITA | 24 | 2,097.50 | 125.45 | 3.54993 | | |
| 19 ATARNETY FIPAPEY | LALDERHEL | R | 3,680.36 | 220.62 | DAVIS | | |
| ALRO FURNITURE COMP | PHEADELPHEA | 84 | 7,050.71 | 2532134 | DAVOS | | |
| 21 AVA 3 REELA, LTD. | MELBOURNE | R. | 877.60 | 32.86 | FORD | | |
| 22 ARADUTIVA DONSTRUCTION | ATLANTA | 24 | 1,937.77 | 116.27 | DAV75 | | |
| 22 AARREDS PACKING | MRCADIA- | .94 | 5,924.11 | 165.45 | 11455 | | |
| 24 B. H. MALTI COMPANY CORP. | LAS VEGAS | NV | 2,929.53 | 175,77 | LOWE | | |
| 25 BAARS CONSTRUCTION CD | BOGA RATON | R | 6,454.70 | 507.28 | 3.34PER | | |
| S BACK CO. | HOL/57(3) | 73 | 5,437.99 | 125.05 | -MOMBILY | | |
| 27 BAILCHIMP & CO, PAPIERS, INC. | MORRIS PLAINS | NJ | 2,451.30 | 147.08 | XNES | | |
| 29 BALANKA CORF. | BOYNTON | FR | 3,079.56 | 284,77 | DAV/25 | | |
| ZI BALANKA PAPERS | INCOMIN | R | 7,141.16 | 132.47 | A PEPER | | |
| KI BARCO COMPANY | CLEARVYA TER | - Fa | 794,87 | 47.69 | INES | | |
| BARMART PROPERTY CONTRA | CLEARWATER COMPTRY | P2 | 0.394.67 | 500-08 | ANDITE | | |
| BECOLOVETRUCTION DE | ATLANTA | E5A | 2,468.59 | 86.11 | MDERS ?! | | |
| ST BIEGK DESIGNS, INC | HAD PIEAD | NO | 851.43 | 25.09 | MONETLY | | |
| 34 BIG ATTA WORLD | PREDAD | Ca. | 2.010.03 | 121.08 | FORD | | |
| Customer Lat A / Determent | uet 0 / | | 10 | | | | 184 |
| | | 3 8 3 mm | 1 at 1 at 1 at 1 | | | | |
| Draw- AutoShapes- > | 0212121313131 | | 11 11 11 11 | | | | |
| | | | | | | CARS JARA | |

Figure 12-13: Insert blank rows for a criteria range

| Talcase + 10 + B J U | 1000日 1000000 | 出现课 | _ · · · A - | 100 | | | | |
|-----------------------------|---|-------|-------------|----------|---------------|---|-----|---|
| 0259 · A CUSTOMER | R | - | 0 | | | 6 | | |
| CUSTOMER | CITY | STAT | SALES | IAX | SALISRIP | 0 | -19 | 1 |
| 2 | | R. | >100000 | 10.09 | | | | |
| CIENTIMAR | CITY | STAT | SALES | IAX | SALLS RIP | _ | | |
| 147TH ST. MATTING COPP. | A SERIES IN | NY | 2,968,12 | 179.29 | BLEWING | | | |
| A.W. DIFORTS | ZICHSVILLE | 31 | 196.67 | 12.60 | ANDERSON | | | |
| ASP ADDIE . DAT | PHEADEPHEA | FVI . | 2,040.89 | 179.45 | PACAETT | | | |
| ARTH& SALCO | ZIONSVELE | 34 | 174.64 | 10.48 | PRIATT | | | |
| E ALTTA DESIGNS, TW. | LAKE MARY | 15 | 3,537.45 | 212.25 | 3340158 | | | |
| T ALL BLIEDWERE SERVICES | P.DIANIPOLIS | 24 | 25.341.00 | 1.533.00 | PORD | | | |
| 2 MILIS MECHANICAL INC | WESTMONT | L. | 5,694.07 | 341.64 | RICER | | | |
| ALL MOR | LAUCEN HEL | 144 | 3,600.20 | 216.49 | ##ACXIETT | | | |
| & AME | GLEW/EW | - B. | 1,976.50 | 118.59 | LAUTER | | | |
| 5 ANCASE CORPORATION | WEERSON | 34 | 5,807.95 | 348.49 | 1-ORD | | | |
| E ADARCHMURS CROW | ATLANTA | 374 | 2,056.37 | 123.36 | DAMES | | | |
| AQUITY OFFICE PROPERTIES | ATLANTA | - 24 | 2,097.50 | 125.85 | 3.PAPER | | | |
| ATARNETY PIPARRY | LALDERHLL | R | 3,680.36 | 220.82 | DAVES | | | |
| STALRO PURMITLES COMP | PHOLADELPHOA | T4 | 3,050.71 | 152.04 | DAM25 | | | |
| RIAVA 3 REFLA, CTD. | MELBOURNE | R. | 877.60 | 32.86 | FORD | | | |
| AXACUTIVA CONSTRUCTION | ATLANTA | 24 | 1,937,77 | 118.27 | DAVITS | | | |
| ANDREES MACKING | WARCADIA. | 274 | 5,014.11 | 155.45 | XVAR | | | |
| B. H. MALTI COMPANY CORP. | ILAS VEGAS | 14/ | 2,929,53 | 175,77 | LOWE | | | |
| A BALARS CONSTRUCTION CO. | BOCA PATON | Pa. | 6.454.70 | 507.28 | ANDPER | | | |
| 5 BADY COL | HOLETCH | TR | 5.417.59 | 325.0h | WE REAL Y | | | |
| BALCHIMP & CO. PAPERS, INC. | MORRIS PLAINE | NO | 2,451.30 | 147.08 | XNES | | | |
| 7 BALANCA CORP. | BOYN/TON | Ph. 1 | 3,679.56 | 184.77 | DAVIS | | | |
| BALANS A PAPERS | BRANDON | B | 3141.10 | 198.47 | ANDER | | | |
| BARCO COMPANY | CLEARWATER | .42 | 254,87 | 47.69 | XMES | | | |
| C DARMARC PEWPRY CONTRA | CLEARWATER CORPUTER | 15 | 0.334.67 | 660.08 | ANDER | | | |
| I BESCO CONSTRUCTION, INC | ATLANTA | E6A | 1,466.59 | 188-11 | ALCENSIN. | | | |
| 2 BROK DESTORES, DAC | HACKENSACK | 143 | #51.43 | 51.09 | ACABLE V | | | |
| DIROW ATTA WORLD | ERISINO | 128 | 2,010.03 | \$21,08 | FORD | | | |
| 4 60.02945 | ABLOUERCLE | 2.05 | 2,953.39 | 153.02 | FRAME | | | |

Figure 12-14: Enter your criteria





You can use Greater Than, Greater Than Or Equal To, Less Than, or Less Than Or Equal To as operators in your criteria range. For example, to find sales greater than or equal to 100, enter >=100 in the Sales criteria row.

- *10.* Click any cell in the main part of the database.
- **11.** Choose Data=>Filter=>Advanced Filter. Excel displays the Advanced Filter dialog box.
- **12.** Select the Filter the List, In Place option in the Action section.
- 13. Verify the database range in the List Range box.
- 14. Enter the criteria range. Excel provides two different ways:
 - Type the criteria range including the header row, but not any blank rows. For example, in Figure 12-15, the criteria range is A1: F2.



Be sure to specify only the rows that contain filtering information. If you include blank rows in your criteria range, Excel includes it in the filtering with the effect of not filtering out any data, thereby returning all records.

- Click the Collapse button to the right of the Criteria Range box and highlight the entire criteria range, including the header row, but not any blank rows. Press Enter to return to the Advanced Filter dialog box.
- **15.** Click OK. Excel places the results of your search in place of your original database (as shown in Figure 12-16).



You cannot place filtered data on a different sheet than the original data, but you can copy and paste it to a different sheet.

16. When you're ready to view all data records, choose Data=>Filter=>Show All.

| | a later to a second | 111100-0081 | A. | | | | |
|------------------------------|---|-----------------|-----------------|--------|--------------------|-------|-----|
| Citeria · & DUSTOMER | and the second se | 1000 | 210121 | | | | |
| COSTOMOR | | I. C. | | E | SALISTOP | 6 | 1 1 |
| CUSIONER | CITÝ. | SIAN | SALIS 100000 | TAX | SALLSRIP | | |
| | ***** | | Accest | | | • | |
| | | | | | | | |
| CUSTOMOR | CITY | STATE | SALES | TAX | SALIS REP | 1 | |
| H7TH ST. MATTING CORP. | ALBERTSON. | NY. | 2,968.12 | 179.29 | BLENING | | |
| A.W. IMPORTS | TIONS/ILLE Indvanced S | ther | 13 | 11.90 | ANDERSON | | |
| ASP ADES INC | HTELACSDITTE MOVANCES | | | 179.45 | PROSTT | | |
| ARTH & SALCO. | ZIOVEVILLE MINT | | | 10.48 | PROJECT SJEATER | | |
| ALITA DESIGNS, INC. | LAVE MARY Providence | | | 212.25 | PORD | | |
| HUSS NEOHNICAL PAC | WESTMONT) | nather locidain | | 341.64 | PLAD | | |
| MALIN MECHANICAL PR. | LALEER MEL Latimos | and the second | 1971 | 216.49 | INCETT | 1.000 | |
| lunc | CLEW/EW | AART-BERE | | 110.99 | MATTE | | |
| WEASE COPPURATION | MEERSON DIMINING | ALTZ. | (5) | 345.48 | FORE | | |
| MARCHANNEL CRIME | ATLANTA | | | 122 1 | DAVES | | |
| AOUTY OFFICE PROPERTIES | ATLANTA | | | 125-05 | MOTO | | |
| ATARMETYPIPARRY | LALEFTHEL Unperson | KS ME | | 231.82 | DAVES | 1 | |
| ALRO PJRZETUPE CORP | IP-2.406UHI | - | | THEN | DAVES | | |
| AVA 3 BEELA, LTD. | MELBOORTE | OK | Cenel | 32.66 | FORD | | |
| AXACUTTVA CONSTRUCTION | STLANTS | 71 | 3,937,77 | 116.27 | DAVES | | |
| ANTREES PACKING | INCADLA | 24 | 5,934.11 | 125-65 | XME | | |
| B. H. MIATI COMPANY CORP. | LAS VEGAS | 1W | 2,929.53 | 175.77 | LOWE | | |
| BAARS CONSTRUCTION CO. | HOCA PATON | 10 | 8,454.70 | 507.28 | 3.MIPER | | |
| BACK CO. | HOUSTON | TR | 5,417.59 | 01,755 | MORELY | | |
| BAILCHIMP & CO, PAPERS, INC. | MORRIS PLAINS | 10 | 2,451.30 | 147/0E | JONES | | |
| BALANKA CORF. | BOYNTON | R | 3,079.56 | 384.77 | DAV25 | | |
| BALAMKA PAPIERS | BRANDON | R. | 3,141.35 | 198.47 | JUNIPER | | |
| BARCOLOMPANY | (LEARWATER | R. | 754,87 | 47.64 | JONES. | | |
| BARMEE POWERY CANTRA | CLEARWATER COLINTRY | 15 | 9.394.67 | 560.00 | 3.84998 | | |
| BIBOD CONSTRUCTION, INC. | ATLANTA | 54 | 1,468.58 | 38.11 | MORISON | 1.000 | |
| DBBR DESIGNES, INC. | HACKENSIACK | 743 | (151.4) | 51.09 | MONELY | | |
| NICLIATTA WORLD | PRENO | Ch. | 2.010.00 | 121.00 | PORD | | |
| | ALBUQUERQUE | 785 | 2,550.33 | 153.02 | FRAME | | |

Figure 12-15: Enter the criteria range

| Wicrosoft Eccol - Contomer test File Edit View Insert Forma | t Tools Data Window | Help | | | | The American State | 1.6 |
|--|---------------------|--|--|----------------------|-------------------|--------------------|-----|
| | | | A | | | | |
| | | Contraction of the local distance of the loc | and the second sec | | | | |
| D258 · A DUSTOMER | | 10.00 | | | | | |
| A | В | E. | D | E | San Barris | 6 H | 113 |
| 1 CUSTOMER | CITY | STAT | GALES | IAX | SALLS REP | | |
| 2 | | R. | >100000 | | | | |
| 4 | | (11.1.1.1.1.) | | | | | |
| 5 CINTOMER | CHY | STAT | SALIS | TAX | SALIS RIP | | |
| THE DATAGE TIVE PATALLIGANCA | CHRCAGO CONTRACT | L. | 102,575.46 | 6,154.59 | 3.747957 | | |
| FLCO | 0400400 | 1- | 104,027.99 | 6,277,68 | PLOER | | |
| 13 KIT IL ENDOC. | 0400A00 | 8 | 100,054.96 | 5.531.30 | 24/24/01/1 | | |
| AP KINAMIN BOSA WOLF B | (DACAGO) | L | 113,252.70 | 6,795.18 | HACKETT | | |
| 61 NLOAPPAL & ASSOCIATES | ORICAGO | E. | 115,517,76 | 6,931,07 | FORD | | |
| SE LASILLA PARTNERS DEAT NG | (H\$CaGO | . R. | 122,500.37 | 7,255.30 | SARANKES. | | |
| RE LIWRANCA IS RACKAL, INC. | 0486460 | n. | 120,184,67 | 7,211.08 7,507.41 | DAVES | | |
| SD PAPEAR CONST. CO. OF P.D. | 046600 | - | 125,048.14 | 7,502.41 | WALKER | | |
| DIPOWARS & SONS LEVIET, INC. | CHICAGO CHICAGO | 1 | 132,693.59 | 7.961.62 | ALTERAS | | |
| 71 POWINES & SOLE CONSTRUCTION | CHICAGO | 1 | 125,347.46 | 8,170.45 | ENWADE | | |
| 47 | | - | and a second | al activities | the second second | | |
| 40 | | | | | | | |
| 95 | | | | | | | |
| 60 | | | | | | | |
| 51 | | | | | | | |
| 62 | | | | | | | |
| 63 | | | | | | | |
| 54 | | | | | | | |
| έδ. | | | | | | | |
| 66 | | | | | | | |
| 57 40 | | | | | | | |
| 89 | | | | | | | |
| 60 | | | | | | | |
| 60 | | | | | | | |
| 67 | | | | | | | |
| 104) 632 | | | | | | | |
| Rai | | | | | | | |
| Austomer List A / Customer U | ett./ | | 1.4 | | | | 3.6 |
| Draw- AutoShapes- > > [] | SELLEM SELEC | A- A-= | Seams. | | | | |
| of Hit metric found | | - | | | | CAPS IA | |

Figure 12-16: A filtered database



Creating Pivot Tables

Many people don't use PivotTables because they find them overwhelming. Yet, this powerful Excel tool helps you, within an instant, see your spreadsheet data in a variety of different ways. PivotTable reports allow you to group information, along with varying levels of detail, by different criteria, such as date or category. They automatically create subtotals of your data on a separate worksheet, which leaves your raw data untouched.

However, PivotTable calculations aren't limited to adding the numbers together. You can use Count, Average, Maximum, Minimum, and a number of other statistical functions to help you view the overall picture of your data.

You can fill any of the four main PivotTable areas with your data by a drag of the mouse and you can display the data in a table format or in one of Excel's many chart formats.

In this chapter, you find out how you can, within a matter of seconds, generate and extract meaningful information from a large amount of data, thereby saving you potentially dozens of hours of manual calculations.

Chapter 13

Get ready to. . .

| ···→ Create a PivotTable128 |
|--|
| ···→ Select and Manage Pivot Data131 |
| \dashrightarrow Change the Calculation Type132 |
| Here AutoFormat PivotTables132 |
| ⊶ Apply Page Fields |
| |
| ··→ Rename a Field134 |
| Here Format PivotTable Values134 |
| 🖙 Generate Multilevel Totals135 |
| 🖙 Group Data Together136 |
| |
| Add Your Own Calculations137 |
| ··→ Create a PivotChart138 |

Create a PivotTable

- 1. Organize your data in a list, while keeping these points in mind:
 - Each column should contain only one type of data, such as dates in one column and values in another column.
 - Make sure each column in the list has a heading label directly above the data. (See Figure 13-1 for an example.) PivotTables use the column headings as PivotTable fields.
 - Do not leave any blank rows between the data and the row headings and no blank columns within the data.
 - Avoid blank cells within the data. If you have duplicate data, use the Copy command to replicate it in the blank cells.
 - If you have more than one list on the same worksheet, make sure at least one blank column and one blank row separate them. Figure 13-2 illustrates a worksheet with multiple data tables. Although you can create multiple PivotTables in a workbook, you can use only one table at a time when creating a PivotTable.
 - Remove any Excel generated subtotals or grand totals in the data by choosing Data=>Subtotals=>Remove All.
 - Plan your questions about how you want your data analyzed. For example, if your data is sales information, perhaps you want to know your sales totals by region or a specific salesperson, or even deeper such as by salesperson and by quarter. If your data is information about your video collection, perhaps your questions are how many DVDs you have with a certain actor as the star, or, how much you paid for all the PG-13 rated movies?

| | and the second se | 5 m. 4 ml | | | | | | | | |
|---------------------------------|---|--------------------|----------|------------|--------------|-----------------------|-------------|---------|---------|-----|
| A2 * A ALBERTO PHAR | | 8 . The . 9 . 140 | 13.108.0 | 1000 | ·· 4 · 1 | | | | | |
| | Ш | E. | D | L. L. | the first | ę. | | | 4 | |
| Customer Name | Country | | | | Invoice Date | | | 60 Days | 90 Days | 120 |
| ALEERTO PHARMACY | USA | Kingsten | 31077 | N30 | 21-004/15 | \$7,979.25 | \$0.00 | \$0.00 | | |
| ALLERTO PRARMACY | USA. | Hingitten | 31137 | 1630 | 38-00-05- | \$7,427.70 | \$0.00 | \$0.00 | | |
| ALL BUSINESS SCELITIONS | USA. | Fingitin | 31164 | M30 | 38-04-45 | \$1,287.81 | \$0.00 | \$0.00 | | |
| ANDERSONS | ABU | Feituman | 31156 | N30 | .28-Oct-05 | \$150.00 | \$0.00 | \$0.00 | | |
| APPLICATIONS USA | USA | Kanna | 31116 | NBO | 27-04-05 | \$210.98 | \$0.00 | \$0.00 | | |
| APPLICATIONS USA | UEA | Penna | 30995 | N30 N30 | 27-0(145 | \$2,496.51 | \$0.00 | \$0.00 | | |
| APPLICATIONS USA AVAILON INT | USA | Packets Mattewn | 31075 | N30 | 27-00-05 | \$8,118.87 BED1 OB | \$0.00 | \$0.00 | | |
| AVATION INT | USA | Matthews | 30019 | 100 | 10.0048 | 31,358.00 | \$0.00 | 50.00 | | |
| LAVATION INT | USA | Matthews | 31087 | 100 | 7 20-00-05 | \$1,253.00 | \$0.00 | \$0.00 | | |
| 2 AVATION NT | UEA | Mattews | 31094 | N30 | * 25-0rt-05 | \$4,914.00 | \$0.00 | \$0.00 | | |
| AVATION IN | UEA | Abyman | 31096 | 100 | * 3-0046 | \$16.102.00 | \$0.00 | \$0.00 | | |
| A AMATION INT | USA | Matthews | 10120 | 1430 | * 29 San (% | \$0.00 | | \$0.00 | | |
| S BACOS CORPORATION | UEA | Rodens | 30920 | 1430 | 10-04-05 | 10.028 | \$14,744.00 | \$0.00 | | |
| BACUS CORPORATION | 14DA | Peting | 100.0 | 7693 | * 12 Ort.05 | \$15,409.00 | \$0100 | 1000 | | |
| BETTY'S BOTIONE | USA | Failuman | 28756 | ND0 | * 18-Mari05 | \$0.00 | \$0.00 | 50.00 | | |
| B BETTY'S BOTOVE | URA | Februtoren | 30641 | NG0 | 7 20 Sep-05 | \$0.00 | 85 200 00 | 50.00 | | |
| B BETTY'S BOTICITE | 1154 | Fairman | 160 | 100 | 20 Srp 05 | \$0.00 | \$5.665.34 | \$0.00 | | |
| BETTY'S BOTORE | USA | Feitaman | 30644 | 100 | * 33-Sep-05 | 10.01 | \$3,7111.00 | \$0.00 | | |
| 1 BETTY'S BOTOVE | USA | Fathorege | STIEZ | NIII. | 7 21-04-05 | \$758.88 | \$0.00 | \$0.00 | | |
| 2 BETTY'S BOTOLE | USA | Fetuman | 3062.0 | NO | 21 Sip06 | 40.00 | 141.35 | \$0.00 | | |
| THEFTY'S BOTIONE | USA | Failurer | 31143 | HEE | 1 38-DULIE | \$3 827 64 | \$0.00 | 50.00 | | |
| A BIL MAR RENTS | UEA | Harry | 10501 | 1430 | * 0/-Dct-05 | \$8,952.20 | \$0.00 | \$0.00 | | |
| FIDE MAR RENTS | 11EA | Faute | 11111 | NW | * 27-00-05 | \$18/083.25 | 40.00 | 40.00 | | |
| E ELLE GARDEN NC | UTA | Augura | 30023 | N30 | 10-0045 | \$10 455 00 | \$0.00 | \$0.00 | | |
| / BLUE GARDEN INC. | USA | Fase | 35122 | NIS | 7 37-00-05 | \$1.735.39 | \$0.00 | \$0.00 | | |
| B BLUE SWEDE SHOE COMPANY, INC | USA | Failurer | 10327 | NGO | 15-May-05 | 60 00 | \$0.00 | \$0.00 | | |
| RIBLUE SUEDE SHOE COMPANY INC | UEA | Fahatan | 31072 | NBO | * 21-00465 | \$586.20 | 30.00 | 30.00 | | |
| DIRUE SUFOF SHOE COMPANY INC | HEA. | Feiturian | 3886 | NIG | 21 Sep-35 | \$0.00 | \$1,36,30 | \$0.00 | | |
| T HILES JOHT | USA | Kingiton | 31161 | 100 | * 31-Dunits | \$650.00 | \$0.00 | \$0.00 | | |
| 2 BOOKERS SUPPLIES | USA | Fetterap | 31124 | N30 | 7 27-Oct 05 | 47 115 00 | \$0.00 | \$0.00 | | |
| TIROTRAVIENS INC | 1154 | Priling | 1094 | NSI | T IBOOME | \$1 (23) 63 | \$100 | - BUIN | | |
| E DOUTLEANDARD INC | 140.0 | Contract | 34000 | 1620 | * 05 OH 05 | #1 103 31 | 60.00 | 10.00 | | |

Figure 13-1: PivotTable data example

| B B B B | \$.% + %4.4 C | - 11 (1) (44)(13) 1) (20, 00) | | | | | |
|-----------------------|--|--|---|--|--|---|--|
| 8 Sales Rop | c | THE REAL PROPERTY. | 3 · 4 · 1 | | | | |
| | t. | | | | | | |
| | | 0 | E F | 6 | 11 | 1 1 | W |
| | Contact Month | Order Totals | 1.0 | Calor | Oty | Cost Totats | - |
| Keigtlan | Mamh | £7 979 25 | | Final | 174 | 2.12 \$ 100.00 | |
| kingston | May | \$7.A27 70 | | Seen | 126 | 3.64 \$1,166.64 | |
| Kneston | Sentember | \$1,287.81 | | Elui | 264 | 271 \$ 715 M | |
| Falteman | Jansarr | \$150.00 | | Yellper | -91 | 4 35 4 389 48 | |
| Kotra | | \$210.98 | | Hiack | 497 | 1 83 \$ 909.61 | |
| Edekimi | | \$7,495.51 | | Gearing | 114 | 3.65 ¥ W14.70 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | - | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Housest | December | | | | | | |
| Falleman | April | \$510.00 | | | | | |
| Fallamin | August | \$666.20 | | | | | |
| Petrman | Pebmary | 61.286.35 | | | | | |
| Kegatan | October | \$650.00 | | | | | |
| Fattiman | Jane | \$7,055.00 | | | | | |
| Perions | June | E1 //20 /63 | | | | | |
| Duskiem | | 81 193 29 | 1000 | | | | |
| | | | 14 | | - | | 3.1 |
| ALL PART | 1. 1. Sec. 1. | AVENTE | 1.10.0 | | | | |
| and the second second | the second s | And in case of the lot | a second s | | | | |
| | Kregston Kozni Kozni Postani Matthews Mathews | Keigtino September Keigtino September Antreme Anarer Autore Research Authore Agent Matthew Agent Matthew Agent Matthew Context Partine Agent Matthew Context Partine Agent Partine Agent | Congito Selender 1,275 ft Pettrum Jauger 1420.00 Kom Jalf 2103.00 Kom Jalf 2103.00 Kom David 1513.00 Mathew Appl 1503.00 Falsen Fabourg 11124.00 Mathew Appl 1503.00 Falsen Fabourg 1125.00 Falsen Fabourg 1125.00 Falsen Fabourg 1125.00 Fabourg 1126.00 Fabourg 110.000.00 <t< td=""><td>Congito Geglessage 91,207.91 Features Assage Matteres Aput Assage Features Matteres Aput Matteres Aput</td><td>Kongtine Singlender 11,207 81 Biol Konn Newer 19300 Tries Konn Newer 19300 With Development Konn Newer 19300 With Bink Martines April 1500 00 Withe Martines April 1500 00 Withe Martines Constant 11,2000 Martines Development 11,27400 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank Mart 14,27400 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank Mart 14,27400 Frank Mart 14,27400 Frank August 15,2600 Frank Mart 14,27400 Frank Mart 14,27400 Frank August 15,2600 Frank Mart 14,27400 Frank 14,27400 Frank 14,27400 Frank 14,27400 Fra</td><td>Porterior Sectements 11,277 81 Biol 2014 Porterior Sectements 11,277 81 Biol 2014 Porterior Sectements 11,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Matthews Appl 10,070 80 When 2014 Matthews Appl 10,070 80 When 2014 Matthews Appl 11,072 80 0 Matthews Appl 11,072 80 0 Matthews December 11,174 400 Patients December 11,174 400 Patients Sectements 11,174 400 Patients Math 128,080 Patients Math 110,025 0 Patients Math 110,000 Patients Math 110,000 Patients</td><td>Congristion Stephender 91,287 81 Blue Science 711,6 753,6 Victoria July 420,000 Blue 427,1 5,70,4 753,6 Victoria July 421,000 Blue 427,1 133,6 533,6 Victoria July 421,000 Blue 427,1 133,6 533,6 Matterine Science Science Occupy 133,6 533,6 Matterine Appl 100,00 White 297,4 4,70,1 133,6 533,6 Matterine Appl 100,00 White 297,4 4,70,1 14,76,00 Matterine Science 114,74,00 Frans.4,70,00 4,70,100 14,71,44,70 Fatamin Appl 14,76,00 Frans.4,70,00 14,71,44,70 14,71,44,70 Fatamin Appl 14,74,00 Frans.4,71,00 14,71,44,70 14,71,44,70 Fatamin Appl 14,74,00 Frans.4,71,00 14,71,70,70 14,71,70,70 14,71,70,70</td></t<> | Congito Geglessage 91,207.91 Features Assage Matteres Aput Assage Features Matteres Aput Matteres Aput | Kongtine Singlender 11,207 81 Biol Konn Newer 19300 Tries Konn Newer 19300 With Development Konn Newer 19300 With Bink Martines April 1500 00 Withe Martines April 1500 00 Withe Martines Constant 11,2000 Martines Development 11,27400 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank Mart 14,27400 Frank August 15,2600 Frank August 15,2600 Frank August 15,2600 Frank Mart 14,27400 Frank Mart 14,27400 Frank August 15,2600 Frank Mart 14,27400 Frank Mart 14,27400 Frank August 15,2600 Frank Mart 14,27400 Frank 14,27400 Frank 14,27400 Frank 14,27400 Fra | Porterior Sectements 11,277 81 Biol 2014 Porterior Sectements 11,277 81 Biol 2014 Porterior Sectements 11,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Porterior Sectements 12,272 81 Biol 2014 Matthews Appl 10,070 80 When 2014 Matthews Appl 10,070 80 When 2014 Matthews Appl 11,072 80 0 Matthews Appl 11,072 80 0 Matthews December 11,174 400 Patients December 11,174 400 Patients Sectements 11,174 400 Patients Math 128,080 Patients Math 110,025 0 Patients Math 110,000 Patients | Congristion Stephender 91,287 81 Blue Science 711,6 753,6 Victoria July 420,000 Blue 427,1 5,70,4 753,6 Victoria July 421,000 Blue 427,1 133,6 533,6 Victoria July 421,000 Blue 427,1 133,6 533,6 Matterine Science Science Occupy 133,6 533,6 Matterine Appl 100,00 White 297,4 4,70,1 133,6 533,6 Matterine Appl 100,00 White 297,4 4,70,1 14,76,00 Matterine Science 114,74,00 Frans.4,70,00 4,70,100 14,71,44,70 Fatamin Appl 14,76,00 Frans.4,70,00 14,71,44,70 14,71,44,70 Fatamin Appl 14,74,00 Frans.4,71,00 14,71,44,70 14,71,44,70 Fatamin Appl 14,74,00 Frans.4,71,00 14,71,70,70 14,71,70,70 14,71,70,70 |

Figure 13-2: Separate multiple data ranges with blank rows and columns

128

- **2.** Click in any cell containing data.
- **3.** Choose Data⇒PivotTable and PivotChart Report. Step 1 of the PivotTable and PivotChart Wizard appears. Excel needs to know where your data will come from:
 - Microsoft Excel List or Database: Creates the PivotTable from organized data in a Microsoft Excel worksheet.
 - External Data Source: Creates a PivotTable from data stored in a non-Excel database.
 - Multiple Consolidation Ranges: Creates a PivotTable from multiple Microsoft Excel worksheet ranges.
 - Another PivotTable Report or PivotChart Report: Creates a PivotTable from another PivotTable report in the same workbook.
- 4. Click the Next button. Step 2 appears.
- **5.** Verify that Excel correctly identified your data range, including the headings. If not, specify the correct area in the Range box as you see in Figure 13-3.
- 6. Click the Next button. Step 3 appears.
- 7. Select the New Worksheet option.



You can use the existing worksheet option if you're creating a PivotChart. You must create PivotTables as a new sheet in the existing workbook.

8. Click the Finish button. The PivotTable and PivotChart Wizard closes and Excel creates a new worksheet with a blank PivotTable, along with the PivotTable toolbar and the PivotTable Field List, which contains each field from your data range (see Figure 13-4). PivotTables contain four primary elements:

| | # A 301 | and the second | 21.00.00 | 100.00 | 8- A-1 | | | | | |
|----------------------------------|---------|----------------------|------------------|----------------|----------------|------------------------------|-------------|---------|----------|-----|
| H36 + A-0 | | | | | | | | | | _ |
| 0 | 0 | E. | D | | | 6 | 17 | 1 | 1 | 100 |
| 1 Customer Name | Country | | | | n Invoice Date | | 30 Bays | 60 Days | S0 Days | 120 |
| Z ALLERTO PRARMACY | | Kingston | 31077 | N30 | 21-10ct-125 | \$7 919,75 | \$0.00 | | | |
| ALEERTO PHARMACY | UEA | Kingston | 31137 | 1630 | 38-001-05- | \$7,427.70 | \$0.00 | | | |
| ALL BUSINESS SCLUTUMS | USA. | Kingitin | 31.16Å | N30 | 38-04-45 | \$1,287.81 | \$0.00 | | | |
| ANDERSONS | UEA | Fetoman | 31156 | 1430 | 28-0ct-05 | \$150.00 | \$0.00 | | | |
| APPLICATIONS USA | UEA | Kans | 31116 | NBD | 27-0:04-05 | \$210.98 | \$0.00 | | | |
| APPLICATIONS USA | UEA | Sec. | 30036 | NRN. | TAOVATE. | \$2,795.51 | \$0.00 | | | |
| APPLICATIONS USA | | Table and Pr | VOICHARTW | trand < St | 18 2 01 3 | Line | \$0.00 | | | |
| AWATION INT | US winn | m if m links if yet. | THE OWNER BY LOD | 11 F | | 08 | \$0.00 | | | |
| ANATION NT | US | 1441 A.1463 | | | Sellin | 208-100 | \$0.00 | | | |
| 1 AVIATION INT | Utal | | | | 1000 1100 | 30 | \$0.00 | | | |
| AVATION NT | UE. | Cancel | 1.2 | 11.4 | Next > | Prod 00 | \$0.00 | | | |
| AVAATION INT | 05 | and the second | | and the second | Married Inc. | 100 | \$0.00 | | | |
| AVATION INT | USA | Matthews | 30/29 | 1430 | 29-5ep-05 | \$0.00 | \$14,744.00 | | | |
| 5 BACOS CORPORATION | USA | 1701031918 | 30920 | NR | 10-0:1-05 | \$4,653,00 | \$0.00 | | | |
| 5 BACUS CORPORATION | MEA | Pening | 30937 | 1630 | 12-0048 | \$15,409.00 | \$0.00 | | | |
| 7 BETTY'S BOTIONE | 1/5A | Faitaman | 28756 | N30 | 18-Mar-05 | \$3.00 | \$0.00 | \$0.00 | 1 \$0.00 | |
| S BETTY'S BODOVE | UEA | Feiturnen | 30641 | 1030 | 20-Stp-05 | \$0.00 | \$5,200.00 | \$0.00 | | |
| 9 BETTY'S BOTIONE | NEA | Feltsman | 30642 | 1030 | 20 Srp.05 | \$0.00 | \$5,665.34 | \$0.00 | NO 08 | |
| EETTY'S BOTIGRE | USA | Feitaman | 30644 | 100 | 30-Sep-06 | \$0.00 | \$3,711 00 | \$0.00 | \$0.00 | |
| 1. BETTY'S BOTIONE | USA | Fatheman | 31067 | NIL. | 21-Oct-05 | \$7.96 88 | \$0.00 | | | |
| 2 BETTY'S BODOLE | USA | Ferrman | 30660 | NO | 21-Sep-05 | 40.00 | \$41.36 | \$0.00 | 80.00 | |
| FRETTY'S BOTICIE | USA | Falliebar | 81145 | 1(30) | 28-0/1-05 | \$3 B27 64 | \$0.00 | | | |
| A BIL MAR RENTS | USA | Kane | 30501 | 1430 | 07-Oct-05 | \$8,932.20 | \$0.00 | | | |
| SIDE MAR RENTS | 11EA | Kauta | 31113 | N30 | 27-0ct-05 | \$18,083,25 | \$0.00 | | | |
| E BLUE GARDEN NC | USA | FIGURE | -80021 | NBE | 10/0445 | \$10 455 00 | \$0.00 | | | |
| 7 BLUE GARDEN INC | USA | Patric | 35122 | H15 | 7 27-Oct-05 | \$3,735.38 | \$0.00 | | | |
| B BLUE SUEDE SHOE COMPANY, INC | USA | Feltiman | 19307 | NGB | 16-May 05 | 40.00 | \$0.00 | | | |
| BIBLUE SUEDE SHOE COMPANY INC | UmA | Fabrican | 31072 | N30 | 11-0046 | \$586.20 | \$0.00 | | | |
| DIRECT SUPPORT SHOP COMPANY INC. | UEA | Peternan | 31073 | N30 | 21 Sep-05 | \$0.00 | \$7,265,30 | | | |
| T BLUES JOINT | USA | | 30685 | N30 | 31-Dit-US | \$650.00 | \$0.00 | | | |
| | | Kingiltin | | NID | | | | | | |
| 2 BOOKERS SUPPLIES | USA | Fetteran | 31124 | | 27-0(105 | 47 0/5.01 | \$2,00 | | | |
| BOCKWORMS NC | UEA | Polina | 30968 | N30 | 18-0048 | \$1 (120 63 A + Arro. 3r) | \$0.00 | | | |
| + + + AR Data | | | 34003 | - 1(30 - | 10"" | 11 100.90 | | 10.00 | an as | 1.0 |

Figure 13-3: Specify the data you want to analyze

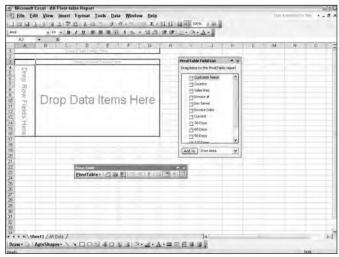


Figure 13-4: A blank PivotTable

- **Rows:** Displays your data vertically, with one item perrow.
- **Column:** Displays the data horizontally, with one item per column.
- Data: Summarizes the numerical data.
- **Page:** Displays each section of data on its own page, which allows you to display data for a single item.
- *9.* From the PivotTable Field List, select the field you want categorized.
- **10.** Select Row Area from the drop-down list at the bottom of the PivotTable Field List. Excel displays each unique item from the field you selected. In Figure 13-5, Excel displays each Sales Rep.



If you want the categorized field displayed horizontally instead of vertically, choose Column Area instead of Row Area from the dropdown list.

11. Click the Add To button.



Optionally, drag a field to its marked area, such as Add Rows Here. As you drag the field, your mouse pointer drags a small gray box.

- **12.** From the PivotTable Field List, select the field you want summarized, such as sales totals.
- **13.** Select Data Area from the drop-down list at the bottom of the PivotTable Field List. Excel takes the data and adds the totals to the PivotTable (see Figure 13-6).



130

The PivotTable Field List indicates fields used in the PivotTable with bold lettering. You don't have to use all the fields in the PivotTable and you don't have to place fields in every area of the PivotTable.

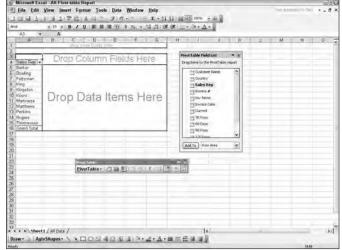


Figure 13-5: Placing a row field

| | al AR Pivet L | | | | | | | | | | | | 276 |
|--|-------------------------|--|---------------------------------------|-----------------------|-------------------|------------------|---------------|-----------|---|---|---|----------|------|
| and the second second | a state of the state of | COMPANY OF THE PARTY | Tools Data | | | | | | | - | | to their | - 6 |
| 1343 | 1412 | | | | | 44 45 100 | | | | | | | |
| Arol | ≥ 10 (B | 1 11 1 | ■ ■ 王 オ | N. 1. 18.2 | 1 18 18 | 1.000 | A- | | | | | | |
| A3 • | | of TOTALS | | | | | - | | | | | | |
| 4 | 0 | C | 0 1 | F | 5 | , н., | 12 | - 1 | × | L | M | 11 | - 6 |
| 21 | - | | | | | parameterization | | | | | | | |
| 3 Sim di TOTAL | 5 | | | | | Press Table | | ** | | | | | |
| 4 Sales Rep 5 Barker | Total 120593 96 | 1. | | | | Drog kins | to the PhotTa | tione vis | | | | | |
| 5 Bowling | 30436.21 | - | | | | 17354 | des Rep | * | | | | | |
| 7 Felternan | 500961.64 | | | | | ETT | 1 1000 | | | | | | |
| 0 King | 14776.91 | | | | | Efin | V Tarme | - 11 | | | | | |
| B Kingston | 433162 61 117205 88 | | | | | Ellip | Vote Date: | | | | | | |
| tő Kjórs 11. Matineze | 19058.22 | | | | | 170 | atorit. | | | | | | |
| 12 Mathews | 312306.35 | | | | | 33 | | | | | | | |
| Cl Perkins | 106(90.35 | | | | | 20 | Dava | | | | | | |
| 14 Ropers | 15464.21 | | | | | 말 90 | | | | | | | |
| 15 Thomasson 15 Grand Total | 7090 96 | | | | | | O Erlava | | | | | | |
| 17. | 1 Abdativit av | | | | | 1175 | TALS | × | | | | | |
| 18 19 | | | | | | - | | | | | | | |
| 19 | | | | | | Add 3a | Rom Area | (in) | | | | | |
| 20 71 72 72 73 73 73 73 73 73 73 73 73 74 75 75 75 75 75 75 75 75 75 75 75 75 75 | | | | | | | | | | | | | |
| 12 | | Territory. | - | - | - | 05 | | | | | | | |
| 19 | | | 前の調査 | 15.0017. | 12.000 | | | | | | | | _ |
| 14 | | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | and the second second | and the second of | all set | | | | | | | |
| 3 | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | _ |
| 1 | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | |
| 24 | . Anenwork | | | | | | 11. | | | | | | |
| + + +\theet | | | | | - | | 14. | _ | _ | | _ | - | - 21 |
| Deaw- Auto | oShapes · 🦎 | 100 | 1400 | 1 2. 2. | A • ≡ | - E 4 1 | 4.2 | | | | | | |
| early. | a a austra a | | | | - | | - | | | | | 34.84 | |

Figure 13-6: A completed PivotTable

Select and Manage Pivot Data

1. On the PivotTable, click the down arrow in the gray heading over the Row Fields section. A list of individual items appears.



To remove any unwanted or misplaced field, select the gray heading and drag it off the PivotTable onto another area of the worksheet.

2. Remove the check mark next to any item you don't want included in the PivotTable.



Optionally, to hide data in a PivotTable, right-click the field and choose Hide. Hiding an item removes it from the report, but the item still appears in the drop-down list for the field.

3. Click OK. In Figure 13-7, only data for two specifically selected sales reps appears in the PivotTable.



Click the Show All option to quickly select or deselect all options.

- **4.** Select any of the following methods to update the PivotTable with any changes made in the original data:
 - Click the Refresh Data button (as shown in Figure 13-8) or the PivotTable button on the PivotTable toolbar; then choose Refresh Data.
 - Right-click anywhere on the PivotTable and choose Refresh Data from the shortcut menu.



To have the PivotTable refresh itself whenever you reopen the file, dick the PivotTable button on the PivotTable toolbar and then choose Table Options. In the PivotTable Options dialog box, select Refresh on Open.



Double-click any data value to display, on a new worksheet, the specific detail from which the data comprised.

| 1 | | r initia Report int Egimat Tools 7 12 | Data Wa | | 141 A FE | | | | - nr | 0 × |
|-------|---|---|-------------|-------------------|----------|--------------------|---|---|-------|-------|
| Au | = 10 = (| B / U = H | | 1.14.210 | | | | | | |
| - | A3 - A 8 | en el TOTALS B | С | D | E | F | G | Ĥ | 1 | 1.12 |
| 1 | Drop Page FI | | | | | | | | | - |
| 2 | | | | | | Ar Field List | ** | | | |
| 3 | Sum of TOTALS | | | | 1000 | e lo the Prod Eade | 10 million 1 | | | |
| 4 | | Total | | | | index Rep | 12 | | | |
| 5 | Feltsman | 500961.6 | | | | by Terms | | | | |
| 6 | Matthews | 312326.4 | | | 100 | Involte Date | | | | |
| 7 | Grand Total | 813288 | | | | Cover Cover | | | | |
| 8 | | | | | | 0 Dave | | | | |
| 9 | | | | | | 0.1Xopy | | | | |
| 10 | | | | | | ITTALS | | | | |
| 11 | | | | | 3 | 10.00.0 | 9 | | | |
| 12 | | | | | Aidai | Titter detta | 1 | | | |
| 13 | | | | | - | | - 244 | | | |
| 14 | | 17-17-0 | - | The second second | 1000 | | | | | |
| 15 | | ElverTable - 1 | (国家町) | 1311-2 | - B 3 | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | - |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | 1 |
| ?? | . H Sheet 1 / AH Data ; | 1 | | S | | 14.1 | - | _ | - | - 34Ē |
| Den | w AutoShapes. | ABOS. | 12 (11 - 1) | 3.2.A. | 単三日日 | 14.8 | | | | |
| tink: | Contraction of the second s | | | | | | | | 14.64 | |

Figure 13-7: Filter data from a PivotTable

| **** | is miles | | 8 8 % | | 141 AAHE 1879 | | | | | |
|-------|----------------------|--------------|-------|------------|-----------------|---------------------------|---|---|---|----|
| - | | 201.5 B | c | | | F | | | | 12 |
| 1 | A Drop Page F | | 6 | D | E | | G | н | 1 | - |
| 2 | which is a flex | (CIVE LIELE) | | | Prest Lable F | ieldList - | × | | | |
| 3 | Sum of TOTALS | | | | Dogtereto | the Product skilly report | - | | | |
| 4 | | Total | | | sde | step | 1 | | | |
| | Barker | 128593.96 | | | ∃Thvo | | | | | |
| | Bowling | 30438.21 | | | 11 Inv 5 | | - | | | |
| | Feltsman | 500961.64 | | | TOP | | | | | |
| | King | 14776,91 | | | 23,29,65 | | | | | |
| | Kingston | 433162.61 | | | 11 9010 | | | | | |
| | Koors | 117205.88 | | | 3 1204 | | | | | |
| 11 | Martineze | 19058.22 | | | 1100 | | | | | |
| 12 | Matthews | 322326.35 | | | | | 3 | | | |
| | Perkins | 106090.38 | | | Applan - | ini kena 3 | d | | | |
| 5.6.4 | Rogers | 15464.23 | | | | | | | | |
| 15 | Thomasson | 7092.98 | Units | We | Contract of the | and the second of | | | | |
| 16 | Grand Total | 1695171.37 | Prot | Table- 🛛 🖥 | ALC: N | 11-1-2.1 | 1 | | | |
| 17 | | Trees and | - | | | | 1 | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | WARRANT / All Date / | | | | | 1AC | | | | |

Figure 13-8: Keep your PivotTable accurate with the Refresh Data feature

Change the Calculation Type

- 1. Click anywhere in the totaled data field.
- **2.** Click the Field Settings button on the PivotTable toolbar or right-click the field and choose Field Settings. The PivotTable Field dialog box, shown in Figure 13-9, appears.
- **3.** From the Summarize By list, select the function you want to use. Choices include Sum, Count, Average, Max, Min, Product, CountNums, StdDev, StdDevp, Var, and Varp.



Optionally, click the Number button and select a format for your summary field.

4. Click OK. Excel re-summarizes the field based on the function you selected. The field title also changes to reflect the selected function.



If you don't want to display grand totals at the bottom, click the PivotTable button on the PivotTable toolbar and choose Table Options. From the PivotTable Options dialog box, remove the check mark from Grand Totals for Columns. Click OK.

AutoFormat PivotTables

- 1. From the PivotTable toolbar, click the Format Report button. The AutoFormat dialog box opens (see Figure 13-10).
- 2. Select a format and click OK.



If you don't like any of the AutoFormat options, you can manually format any PivotTable section through the Field Settings feature.

| and the second se | £ 14776.91 | | | - | | ~ | | | |
|---|--|--------|-----------------|--------------------------|--------------|-----|---|-------|-----|
| A | e Fields Here | C | D | E | F | G | н | | |
| 1 Drop Pag | e riens nere | | | Prest Fable F | ielittint . | . * | | | |
| 3 Sum of TOTA | arel 1 | - | | Dogtersto | He Postish - | et | | | |
| 4 Sales Rep | Total | 100 | retTable Field | | 60 | 1 | | | |
| 5 Barker | 128593.96 | 1.00 | Coart of TC | The second second second | Dir. | | | | |
| | 30438.21 | 19 | | | Circul | | | | |
| 6 Bowling 7 Feltsman | 500961.64 | | marter (a 17 | 14 E | 1940 | | | | |
| 8 King | 14776.91 | Geo. | 10.000 | 1 | mier | | | | |
| | 433162.61 | 3.6 | | 10 | 146.000 | | | | |
| and the second se | 117205.88 | 10 | Tulke | 4 ···· | CONT. | _ | | | |
| 10 Koors 11 Martineze | 19058.22 | 12 | | 11 -1 | - | | | | |
| 12 Matthews | 322326.35 | | | - | - | * | | | |
| 13 Perkins | 106090.38 | | | ANTE | tani Antos | × | | | |
| and the second se | 15464.23 | | | | | | | | |
| 14 Rogers 15 Thomasson | 7092.98 | Intell | 1700 | | _ | | | | |
| | | | | 1115(5) | 101101 | N | | | |
| 16 Grand Total 17 | 1695171.37 | (Bitts | AND COMPANY | 1441020-000 | COLUMN 1751 | - | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| | | | | | | | | | - |
| 20 | | | | | | | | | |
| | | | | | | | | | |
| 22 | uta / | | | - | tat. | - | | | 134 |
| Draw+ AutoShape | · \ \ DOE 40 | N A IS | -2-3-5 | 1004.8 | 8 | | | | |
| | and the second | - | 1 | 5-15 (Br. 19-17 | | | | 18.84 | |

Figure 13-9: Select a different summarizing function

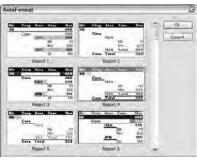


Figure 13-10: Select an AutoFormat from any of the many options

Apply Page Fields

1. From the PivotTable Field List, select the field you want to use to subdivide your PivotTable. For example, if you want to see the total sales of each sales rep by country, you select the Country field.



Page fields allow you to filter the entire PivotTable report to display data for a single item or all the items.

- 2. Drag the field onto the Drop Page Fields Here section.
- **3.** From the Page Field Selection drop-down list, select the field by which you want to filter. Figure 13-11 shows the sales total for the Canadian sales reps, instead of viewing all sales reps sales totals.

Generate Separate PivotTables

- 1. Save your file. The Undo function isn't available for this step, so if you don't get the results you expected, you have to manually delete each and every added worksheet.
- **2.** From the Page Field Selection drop-down list, select the field by which you want to filter.
- **3.** Click the PivotTable button on the PivotTable toolbar and choose Show Pages.
- **4.** Click OK at the resulting Show Pages dialog box. As Figure 13-12 shows, Excel generates a PivotTable for each field (in this example, Country), each on its own worksheet in the workbook.

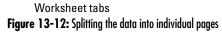


To delete an unwanted separate PivotTable worksheet, right-click the unwanted worksheet tab and choose Delete. Click Delete again at the resulting confirmation message.

| | 4 A CA | NADA | | | | | | | | |
|----|-----------------------|----------|--|---------|--|-----------------------|----|---|---|-----|
| | A | В | С | D | E | F | G | н | 1 | 1.3 |
| 1 | Country | CANADA - | | | Presit Fable 1 | | - | | | |
| 2 | | | | | | Tariha kasa | | | | |
| 3 | Sum of TOTALS | | | | the state of the second st | uner Rend | | | | |
| 4 | Sales Rep (. | Total | | | Pitos | | 1 | | | |
| 5 | Kingston | 15298 | | | 1050 | | | | | |
| 6 | Matthews | 62428,05 | | | 25200 | | | | | |
| 7 | Perkins | 36568.2 | | | 19.00 | Ren Claim | | | | |
| 8 | Rogers | 488.85 | | | HOP | | | | | |
| 9 | Grand Total | 114783.1 | | | 13.952 | | | | | |
| 10 | | | | | [] (0.5 [] (0.5 | | 1 | | | |
| 11 | | | | | - matm | | 6 | | | |
| 12 | | | | | Add To. | Iby Area | - | | | |
| 13 | | | | | - | | | | | |
| 14 | | | | | | _ | | | | |
| 15 | | | Concession in which the Party of the Party o | 11 | and the second | and the second second | 13 | | | |
| 16 | | | Plant | Table - | · 利二二 | 15.0 | 2 | | | |
| 17 | | | | | | | | | | _ |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | 1.5 |
| 21 | | | | | | | | | | 1.1 |
| 22 | H) Shret1 / AR Data / | | | | | 141 | | | | |

Figure 13-11: Separate data by adding a field to the Page area

| - | | Cauntry | | | - | - | - | | | - |
|----|--------------|---|-------------|---|------------------------|-----------------|---|---|---|---|
| - | A | B | C | D | E | F | G | H | 1 | - |
| 1 | Country | AUSTRALIA | | | Prost Fable Field D | NI * 8 | | | | |
| 2 | | | | | Drag Rend to the P | nottale report. | | | | |
| 3 | Sum of TOTAL | | | | | tion (1) | | | | |
| 4 | Sales Rep | + Total | | | Country | | | | | |
| 5 | Matthews | 26600 | | | Sales Reg | | | | | |
| 6. | Perkins | 557.02 | | | Tanace . | | | | | |
| 1 | Grand Total | 27157.02 | | | - Invoice Da | Avr. | | | | |
| 8 | | | | | GGarert | | | | | |
| 9 | | | | | Clastrava Clastrava | | | | | |
| 11 | - | | | | E 90 Days | | | | | |
| 2 | | | | | - set on Deser | ~ | | | | |
| 13 | | | | | Add To For R | 1981 - 1997 | | | | |
| 14 | | | | | | | | | | |
| 14 | | | Transfer of | _ | _ | THE OWNER WHEN | | | | |
| 16 | | | | | #1) | In all | | | | |
| 7 | | | 191111 | | and a second second | CARD OF LED | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | and the second se | - | | | | | | | |



Rename a Field

- 1. Select the field you want to rename.
- **2.** Click the Field Settings button on the PivotTable toolbar. The PivotTable Field dialog box opens (see Figure 13-13).



Optionally, click the field name in the PivotTable and begin typing a new name. Press Enter when you are finished.

- **3.** Type the new name in the Name text box.
- **4.** Click OK. Only the name on the PivotTable appears with the new name. The PivotTable Field List doesn't change.

Format PivotTable Values

- 1. Select the heading for the field you want to modify.
- 2. Click the Field Settings button on the PivotTable toolbar.
- **3.** From the Field Settings dialog box, click the Number button.
- **4.** From the Format Cells dialog box (see Figure 13-14), select the Number format you want.
- *5.* If applicable, select the number of decimal places you want.
- 6. Click OK twice.



To change the format of PivotTable text, select any desired text cells and format them with the tools on the Format toolbar or though the Excel Format Cells dialog box (choose Format=>Cells).

| - | - 10 - 10 58 - A 147 | | M 4 | (14 14 19 19 19 19 19 19 19 19 19 19 19 19 19 | # | 108 | | | | |
|------|--|------------|-----------|---|--------------------------|--|-----|---|-------|------|
| | A | В | C | D | E | F | G | н | 1 | |
| 1 | Drop Page Fi | elds Here | | | Prest Lable F | eleftint - | 1 | | | |
| 2 | e entre la contrata en el | | - | | | the Prot Lake was | | | | |
| 3 | Sum of TOTALS | 11 | Ph | stTable Field- | | | 6 | | | |
| 4 | | Total | 1962 | rated this | Contraction of the local | DF | | | | |
| 5 | Barker | 128593.96 | 5.4 | Coart of 101 | | Carsol | | | | |
| 6 | Bowling | 30438.21 | | marterla | - | - | 1. | | | |
| 7 | Feltsman | 500961.64 | 200 | | 1.00 | Contraction of the local division of the loc | | | | |
| 8 | King | 14776,91 | DA: | | 1 | mler | | | | |
| 9 | Kingston | 433162.61 | | 7.60 | 10 | 15.000 | | | | |
| 10 | Koors | 117205.88 | 20 | of theme | × | | | | | |
| 11 | Martineze | 19058.22 | - | | I Jaco | | ¥. | | | |
| 12 | Matthews | 322326.35 | | | aitin a | teri denia | * | | | |
| 13 | Perkins | 106090.38 | | | (contraction) | | 241 | | | |
| 14 | Rogers | 15464,23 | | | | | | | | |
| 15 | Thomasson | 7092.98 | India | | 14 | | 0 | | | |
| 16 | Grand Total | 1695171.37 | Prot | lable- 🔤 📷 | 112213 | | 2 | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | and the second second | | | | | | | | | |
| | · ···································· | - most an | an air ai | | | 14.1 15 | | | · | 1.00 |
| Draw | A. Allingeriet. | 100540 | 10.21.2 | 2.4.2 | 1000 | 康. | | | 14.04 | |

Figure 13-13: Rename a PivotTable field

| | | 8 7 U II W II | 日本ための | 1.21.00 | 18 _ · D · . | 4-1 | | | |
|---------|---------------------|---------------|---------------------------------------|----------------|-----------------------------|-----------------|------------|---|-------|
| - | 5 - A 12 A | B B | C | D | E | F | G | н | |
| | Country | (All) | . L. | U | - Prontinuite | ····· | 9 | n | - |
| 2 | obuility | ((WI) | | | The first the state | VOTAS | - Co | | |
| | Sum of TOTALS | | | | - Contraction of the second | 2 TOTALS | 00 | | |
| 5.00 | Representative - | | | | Demain by | | Cent | | |
| | Barker | 128593.96 | | | Sec. Sec. | | 198 | | |
| | Bowling | 30438.21 | Format Cells | | Cart | 0 | Di Deimoni | | |
| | Feltsman | 500961.64 | Maridae | | | | Inderstat- | | |
| and the | King | 14776.91 | Ditegry | | uk. | | 1 | | |
| | Kingston | 433162.61 | General Number | 4. | 2,591.96 | - | 11 | | |
| | Koors | 117205.88 | Accountry: | | udden i | 10 | 1 | | |
| 1 | Martineze | 19058.22 | Detw Sine | 1 | be: | WI. | | | |
| 12 | Matthews | 322326.35 | Perceritage Teaction | 5% | when its and depress | | | | |
| 3 | Perkins | 106090.38 | Scentific. Text | | Dis. La | - | 1 | | |
| 4 | Rogers | 15464,23 | Steller Claskom | 1011 | 21/1 | | - | | |
| 15 | Thomasson | 7092.98 | | | | | | | |
| 6 | Grand Total | 1695171.37 | - Convertinger | e und be as | and secondary calm | . industria | | | |
| 17 | | | Tornats to align dep | and parties we | etularet: | a second second | 1 | | |
| 18 | | | - | | _ | | | | |
| 9 | | | · · · · · · · · · · · · · · · · · · · | | 10 | Gittel | 1 | | |
| 20 | | | - | | - | | - | | |
| 21 | | | | | | | | | |
| ?. | WARNets / AR Data / | | _ | | | tar. | | | - 14 |

Figure 13-14: Setting value formats

Generate Multilevel Totals

- 1. Create a PivotTable (see the "Create a PivotTable" section, earlier in this chapter).
- **2.** To create a second summary level, drag the next field you want to subtotal from the PivotTable Field List onto another PivotTable area, keeping these pointers in mind:
 - If you want to create a second category, such as by Country, and then by Salesman, drag the field onto the Row area. Figure 13-15 shows a PivotTable with two categories. The field closest to the data is called the inner row (in this example, Sales Rep). The other field is called an outer row (in this example, Country). Excel displays data in the inner row under each of the outer row fields.
 - If you want to total additional fields, drag the field into the Data area.
 - If you want to sum different fields, or if you want to create two different total types (such as count and sum, or max and min), select a field you have already used. Currently used fields are listed in bold type. As you see in Figure 13-16, the fields appear vertically in the Data area.



You can add even more data fields to your PivotTable. PivotTable data fields are only limited by the amount of memory in your computer.

• If you want the data fields displayed horizontally, drag the gray Data button onto the cell that has the Total heading. Excel rearranges the data fields.



To redisplay the data in a vertical format, drag the Data button to the left, onto the Row area.

| 1293. | 1417121 | | | | 1 12m | | | | |
|----------------------|-----------------|---------------------------|--------------|-------|----------------------------|-----------------------|--|---|-----|
| et 🖌 | * 10 * B / 1 | | No. 1, 74 44 | 2.2 | · · · 4 · | | | | |
| A A | A 1/15/102 | C I | D | E | F | E | H | 1 | 1 3 |
| 1 | | the second second | U | (P) | F | 6 | n | | |
| 7 | | | | 102 | of Lable Field List | ** | | | |
| 3 TOTALS | 1 | | | | of D apple Press Links | | | | |
| | · Sales Fiep I. | Total | | Le Le | ed trime to the en-of type | e oport | | | |
| 5 AUSTRALIA | | \$26 600 00 | | | Custome Name | 1 | | | |
| 6 | Parlines | \$557.02 | | | Enertry | | | | |
| 7 AUSTRALIA | Total | \$27,157.02 | | | 5 Sides Repi | | | | |
| a CANADA | Kingston | \$15,298.00 | | | Timora # | | | | |
| <u><u>u</u></u> | Matthews | \$62,428,06 | | | II) tree terms | | | | |
| 10 | Petkins | \$36,568.20 | | | Thuck's Date | | | | |
| KT. | Rogers | \$488.85 | | | Thread | | | | |
| 12 CANADAT | otal | \$114,793.10 | | | EL 2010044 | | | | |
| 13 LOC | Kingston | \$15,309.42 | | | EI 60.0eon | | | | |
| 14 | Mellhives | \$22,784.62 | | | ET 90.0994 | w | | | |
| 15 UK Total | | \$38,094.04 | | - | on thilines. | | | | |
| 16 USA | Barker | \$128,593.95 | | 0 | ledd Tas allow Armie | (m) | | | |
| 17. | Eowing | \$30,438.21 | | | | | | | |
| 18 | Feitsman | \$500,961.64 | | | | | _ | | |
| 18 | King | \$14,776.91 | | | 1140 | and the second second | Contraction of the local division of the loc | | |
| 20 | Kingston | \$402,555.19 | | 294 | ulTable - 2 | 한 역 편 1 | 11) 4 9. 3 | | |
| 21 | Koors | \$117,205,88 | | | | | | | |
| 20 21 22 23 | Martineze | \$19,058,22 | | | | | | | |
| 23 | Matthews | \$200,513,68 | | | | | | | |
| | Petkinit | \$68,965.16 | | | | | | | |
| 25 | Rogens | \$14,975.38 \$7,092.98 | | | | | | | |
| 27 JUSA Total | Thomasson | \$1,505,137,21 | | | | | | | |
| 28 Grand Total | | \$1,685,171,37 | | | | | | | |
| Take-II - | | | | | | | | | |
| A. B. M. SPANART. | / AN DATA MARKE | At A | | | 141 | | | | - 5 |

Figure 13-15: Multiple category fields

| And | 393-1 | 11744 | | | | A STATE S | 18 | | |
|---------|-----------------------|----------------------|-----------------------------|---------------|-------------|-----------------------|-----------------|-----------------|-----|
| 1.1.1.1 | A3 * | * 10 * B / U | | St. A. (24.52 | 3.35 | | | | |
| | Ā | E | 5 | D | Б | F | 9 | 17 | 1.3 |
| 1 | | | line" | | _ | | - | | |
| 21 | | | | | | Prest Estate Field La | | | |
| | Sales Rep [Backet | Sum of Current | Total \$0.00 | | _ | Drog trime to the Ph | ot table water. | | |
| 20 | Distriction | 30 Days | \$0.00 | | - | Pri Gatures N | A - | | |
| 7 | | 60 Days | 50.00 | | _ | - Courts | | | |
| 7 | | 90 Days | \$0.00 | | | Sales Rep | - III | | |
| n | | 120 Devs | \$128,593,96 | | _ | TT INVOLUE | | | |
| in a | | TOTALS | \$128,593.96 | | - | mility farm | | | |
| | Bowling | Sum of Currect | \$28,560 15 | | _ | Tivese Date | | | |
| 11 | Coline B. | 30 Days | \$1,878.06 | | _ | Durnit | | | |
| 12 | | 60 Days | \$0.00 | | _ | 30 Days | | | |
| 13 | | 90 Days | \$0.00 | | _ | = 60 Days | | | |
| 14 | | 320 Days | \$0.00 | | | = 90 Days | | | |
| 15 | | TOTALS | \$30,438,21 | | | 1 20 Dates | * | | |
| 15 | Feltsman | Sum of Current | \$311,504.86 | | | Add Tal allow Are | 14 (m) | | |
| 47. | | 30 Days | \$144,216.69 | | | - | | | |
| 18 | | 60 Drayn | \$27,931.00 | | | | | | |
| | | 90 Days | \$0.00 | | null i sile | | - And Share | Contract of the | |
| 20 | | 120 Deys | \$17,309.09 | | ProofTable | 61 白口目 | 191 | 3 9/3 | |
| 21 | | TOTALS | \$500,961.64 | | | | | 1000 | |
| | King | Sum of Current | \$14,776.91 | | | | | | |
| 23 | | 30 Days | \$0.00 | | | | | | |
| 24 | | 60 Days | \$0.00 | | | | | | |
| 25 | | 90 Days | \$0.00 | | | | | | |
| 26 | | 120 Diays TOTALS | | | | | | | |
| | 10 martine | Sum of Current | \$14,776.91 \$264,149.12 | | | | | | |
| | Kingston | All Dits & MultiVert | | | | | | | |

Figure 13-16: Multiple data fields

Group Data Together

- **1.** Create a PivotTable (see the "Create a PivotTable" section, earlier in this chapter).
- **2.** Click in any cell of the field you want to group. A popular field to group is a date field.
- **3.** Click the PivotTable button on the PivotTable toolbar, and choose Group and Show Detail=>Group.
- **4.** From the Grouping dialog box, select the grouping option you want to use. The options that appear depend on the type of data you are grouping.
- **5.** Click OK. Figure 13-17 illustrates two pivot table examples; one with the dates in detail and the other with the dates grouped together by month.



To ungroup categories and redisplay the entire list, click the PivotTable button and choose Group and Show Detail=>Ungroup.

Calculate a Percent of Totals

- Add a second totals field and display the two fields horizontally (see the earlier section, "Generate Multilevel Totals").
- **2.** Select the second totals field and click the Field Settings button on the PivotTable toolbar.
- **3.** From the PivotTable Field dialog box (see Figure 13-18), choose % of Column from the Show Data As drop-down list.
- **4.** Click OK. Excel displays the second totals field as a percent of total.

| File Edit View Imart F | | | 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. |
|---|---|---|--|
| 133314122 | 12 A 4 | 1 1 1 40 43 1000 2 | |
| Anal = 10 = B | 7.2. 新算算法 主法 (協力) | 1 0 | |
| At - & Cour | | | |
| AR Proof table Report? | * | AR Prostable Reparet | |
| A D | C D E I F S | | 6 E I |
| 1 Country (All) | | 1 Country (All (- | ACC - F |
| 3 County Theory 140 | and the second se | 3 | |
| 3 (000) | | 3 Tinain | |
| 4 Date in Total | | A Date (+ Teta) | |
| 5 1/14/05 52,906 04 | Prest Table Facilitant * x | 5 Jan \$3,01510 | |
| b 1/25/06 \$109.06 | | 6 Fah \$654.73 | |
| 7 2/105 \$115.68 | Delag Bernis (c) she Prival Cabler report | 7 Mar \$3,055.18 | |
| 8 2/14/05 \$107.45 | PH Clustoller Nation | E Apr \$1,006.49 | |
| 9 2//8/05 \$209.04 | Country | B May \$510.00 | |
| 10 2/28/96 \$222.66 | En Sales Rep | 10 Jun \$15.600.00 | |
| 11 3/15/05 \$2,469.88 | Date | 1] Jul \$4,630.68 | |
| 12 3/16/06 \$182.60 13 3/16/06 \$182.60 | | 12 Aug 894,514 09 | |
| | Totals | 13 Sep 143.522.09 | |
| 14 4/0/06 \$761 F9 15 4/01/06 \$316.00 | | 14 Oct 12/13/198/04 t5 New \$129/383.96 | |
| 16 4/12/15 \$535.30 | | 16 Geand Total \$520,1% 36 | |
| 17. 4/15/05 \$193.00 | | 10 (Seano (Cha) \$220,000 30) | |
| 10 5/16/05 \$510 00 | | 10 | |
| 19 6/17/05 \$26,800.00 | Add fas Rose Area M. | - 19 71 | |
| 20 7/1406 \$615.00 | | - 20 | |
| 20 7/1406 \$615.00 70 7/13/05 \$115.68 | and the second se | 21 | |
| 22 //2606 \$4,000.00 | Uvyet1a.ac | | |
| 23 8/1 05 \$41,568 00 | PivotTable * | 1 4 年1 (1) (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2 | |
| 24 8/2/05 \$17,888.98 | L-second second | 1141 | |
| Z2 //25/06 M4 (000 00) Z3 8/1 06 \$41,588 00) 24 8/0.05 \$17,888 98 25 8/4.05 \$1052 07 26 8/10.06 \$22,3/3.92 | | 2 | |
| 76 8/10/16 \$227,373.92 | | 10 | |
| 27 8/12/25 \$12 313 12 | | 12 | |
| 28 3/1/05 \$2 228 30 29 3/2/05 \$10,595 60 | PivotTable - | 120 | |
| 29 9/2/06 \$18,995.68 30 9/5/06 \$2,929.29 | | 30 | |
| 3505 \$9,06 54 | | 30 | |
| 32 9/7/06 \$1,907.62 | | w 32 | |
| H + + H Dates Detailed (Gr | suped / 14 beau | H + + H Dates / Detaved) Grouged | |
| a second s | | and the second se | |
| Deaw - AutoShapes - | 10014003 2-2-4 | | |
| | | | 14.04 |

Figure 13-17: Group data together

| I Elle Edit View Insert Format Tools Data Windo | x = φ1 ±1 ± ω (ψ) ω (ψ) = x | ne e transmiter taxi • • • 8 |
|--|--|------------------------------|
| And = 10 = 1 B / U B B = 1 S %. | · [2] 2] 2] 2] [2] · [2] | |
| A B C O | EFGHFJF | E M N |
| Descrip Long CHAP ChaP State CHAP State State State State State State State State State S | Providable Field (2) Save field (20%2) New % of Management Save field (20%2) New % of Management Save field (20%2) Save | |
| 21 22 23 24 24 25 | | |

Figure 13-18: Create special calculations

Add Your Own Calculations

- **2.** In the Name text box, type a name for the formula, such as **CommAmt**.



Calculated Field names can include spaces and special characters.

- **3.** In the Formula box, delete the =0 and create your own formula, following these tips:
 - Like other Excel formulas, begin with an equal sign, but use field names instead of cell references.

| (a) |
|--------------|
| |
| \mathbf{r} |

While you can't use cell references in a formula, you can use static values.

- Double-click any field name in the Fields box to add it to the formula.
- Use the standard formula operators such as plus, minus, multiply, and divide (+, -, *, and /).
 Figure 13-19 shows a formula that calculates a 12% commission on the sales rep totals.
- **4.** Click OK. Excel creates a new data column with the calculated value. Figure 13-20 shows a PivotTable with a calculated field next to the data field.



If you no longer want the calculated field on your PivotTable, drag the calculated field heading off the PivotTable, and onto another area of the worksheet.

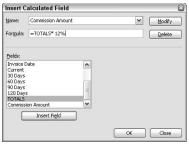


Figure 13-19: Create a customized calculation formula

| | - B / U E E E | 田林市 (田田)第8 | 10.0 | · 4 · 1 | | | | | |
|------------------|--|----------------------|---------|----------------------|----------------|---|----|-------|-------|
| E | 8 | 6 1 | D | E | P | G | 11 | 1 | 1 |
| 1 (Country | (Ad) | | | | _ | | | | |
| 2 | | | | | | | | | |
| 3 | Data 🕞 | | Therein | adde Field Ltd. | + x | | | | |
| A Representative | | of Commission Amount | | | | | | | |
| 5 Barker | \$128,593.96 | \$15,431,28 | Dringt | termit to the Pred | Table report | | | | |
| 6 Bowing | \$30,438,21 | \$3,652.59 | - 1/3 | This Theas | 0 | | | | |
| 7 Feltsman | \$500,961.64 | \$60,115.40 | -103 | Divisio Inda | | | | | |
| 8 King | \$14,776.91 | \$1,773.23 | - 13 | Currente | | | | | |
| 9 Kingston | \$433,162.61 | \$51,979.51 | | 130.0wm | | | | | |
| tu Koots | \$117,205.88 | \$14,064,71 | - 1.2 | \$ 60 Curr | | | | | |
| 11 Martineze | \$19,058.22 | \$2,286.99 | -123 | 3 (0 Curry | | | | | |
| 12 Matthings | \$872,326.35 | \$38,679.16 | 11/2 | 11/0 Gay | | | | | |
| 13 Perkins | \$106,090,38 | \$12,730.85 | 141 | | - 10 | | | | |
| 14 Rogers | \$15,464.23 | \$1,855.71 | 0.0 | in the second second | Villa I | | | | |
| 15 Thomassen | \$7,092.98 | \$851.16 | Ab | 30- Stree Arma | - | | | | |
| 16 Grand Total | \$1,695,171.37 | \$203,420.56 | - | _ | _ | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 20 | | | | | | | | | |
| 20 | | West Table | - | _ | - | | | | |
| 21 22 | | | - | | 2.4.0 | | | | |
| 23 | | EivotTable - | 21 | 1.1.1.1 | 2012) 2012) | | | | |
| 23 | | | | | | | | | |
| 64. 116 | | | | | | | | | |
| 25 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 26 | | | | | | | | | |
| | and the second s | | | - 14-12 | | | | | |
| + + + \thet1/M | | | | 141 | _ | - | | - | - 533 |
| Draw - AutoShup | HALLODAY HA | 2013 2+2+2+3 | 宗田福 | 18.9 | | | | | |
| and a | and the second second second second | | | | | | | 14.84 | |

Figure 13-20: A customized formula calculation added to a PivotTable

Create a PivotChart

- 1. Create the PivotTable (see the earlier section, "Create a PivotTable").
- 2. Click anywhere in the PivotTable.
- 3. Click the PivotTable button on the PivotTable toolbar.
- **4.** Choose PivotChart. Excel automatically inserts a new worksheet with a chart based on the PivotTable (see Figure 13-21). All PivotTable data, except for the totals and subtotals, appear in the PivotChart.



Optionally, click the PivotChart button on the PivotTable toolbar.

Changes to the PivotTable affect the PivotChart and field changes to the PivotChart affect the PivotTable.

- *5.* Format the chart (see Chapter 9) with the following exceptions:
 - You cannot move or resize the plot area.
 - You cannot move or resize the legend.
 - Refreshing the PivotTable removes any manually applied chart formatting.
 - PivotCharts cannot be scatter, bubble, or stock charts.
 - You cannot add data to the PivotChart from outside the PivotTable.
 - You can use the PivotField buttons with the same functionality as those in the PivotTable. See Figure 13-22.



To delete the PivotChart, right-click the chart sheet tab and choose Delete.

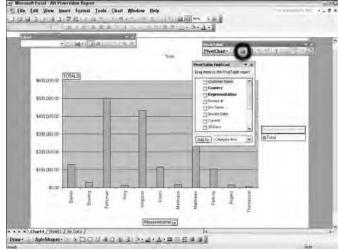


Figure 13-21: Create a PivotChart

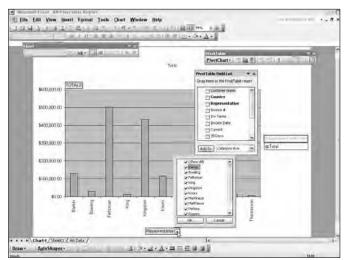


Figure 13-22: Display selected data using the PivotChart buttons

Building Simple Macros

You can often save yourself time by automating tasks you perform frequently. The automation takes the form of an *Excel macro*, which is a series of commands and functions grouped together as a single command. Macros are created in a special programming language called Visual Basic and can be run whenever you need to perform the task.

While you can write your own very complex macros in the Visual Basic programming language, the easiest method for many macros is to use the Excel Macro Recorder. When you record a macro, Excel stores information about each step you take as you perform a series of commands. You then run the macro to repeat, or *play back*, the commands.

The macro recorder is very literal and records every action you complete. Therefore, planning your macro before you begin the recording process is very important so you don't record unnecessary steps.

Security is an important issue when working with macros, because if you open worksheets from other sources, the worksheets may contain macros that are harmful to your computer. By default, Excel protects you from running macros, but if you're creating your own macros, you'll probably need to change the security settings.

In this chapter, you find out how to change your security settings, as well as how to record, run, and delete Excel macros.



Get ready to. . .

| "➡ Record a Macro | 140 |
|---------------------------------|-----|
| Heck Macro Security Level | 141 |
| ➡ Run a Macro | 142 |
| ➡ Assign a Macro KeyStroke | 142 |
| 🗝 Create a Macro Toolbar Button | 143 |
| ➡ Stop a Macro | 143 |
| 🖚 Delete a Macro | 144 |
| 🗝 Delete a Personal Macro | 144 |

Record a Macro

- 1. Choose Tools与Macros Record New Macro. The Record Macro dialog box, shown in Figure 14-1, appears.
- 2. In the Macro Name text box, type a name for the macro:
 - The first character of the macro name must be a letter.
 - Macro names cannot contain spaces. You can use letters, numbers, or the underscore character.
 - You cannot use a cell reference as a macro name.
 - Macro names are not case sensitive.
- **3.** Select where you want to store the macro from the Store Macro In drop-down list:
 - This Workbook: Save the macro in the current workbook. If the file is a template, Excel stores the macro with the template. Any workbook using the template has access to the macro.
 - New Workbook: Create macros that run in any new workbooks created during the current Excel session.
 - Personal Macro Workbook: Choose this option if you want the macro to be available whenever you use Excel.
- **4.** Type a description of the macro in the Description box. Click OK. A Stop Recording toolbar, as shown in Figure 14-2, appears on-screen.
- *5.* Perform the actions you want to record.



If you want to record the steps relative to the current cell, such as (Go up one row and insert a blank line), click the Relative Reference button on the Stop Recording toolbar.

6. Click the Stop Recording button or choose Tools ↔ Macro ↔ Stop Recording.

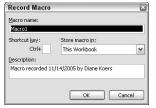


Figure 14-1: The Record Macro dialog box

| | 41 - 6 4306 | 1 11 | F.R.M. | 24.0 | 1 | - | ** | - | 10.44.0.5 | | | | | | |
|----------------------|----------------------|------|---------|------|---------|-------|---------|----|-----------|--------|------|------|---|---|---|
| | A | | В | | C | 10 | D | | E | F | G | н | T | 1 | 1 |
| 1 2 | | - | Tanuary | - | Februry | _ | March | | Totals | Sate | | | | | |
| 3 | Revenues | | aminuty | - | Dettail | - | Parten | - | 10585 | 254180 | | | | | |
| 4 | East | e | 42.975 | \$ | 49.421 | 1 | 56.834 | 4 | 149.231 | 21.1% | | | | | |
| 5 | West | - | 37 485 | ŝ | 43,108 | 5 | 49.574 | 10 | 130 167 | 261% | | | | | |
| 6 | North | | 26,994 | 12 | 33.348 | 1÷ | 38,345 | 1 | 100.682 | 20.27. | | | | | |
| 7 | South | 8 | 49.722 | ÷. | 42,584 | i i i | 26.081 | 4 | 118,787 | 23.95 | | | | | |
| 89 | Total Revenues | ş | 159.177 | Ť | 168,856 | ş | 170,834 | ş | 498,857 | 100.0% | | | | | |
| 10 | Expenses | | | | | | | | | | | | | | |
| H. | Supplied | 9 | 32,568 | 8 | 37,452 | 3 | 43:070 | 11 | 113.090 | 22.75 | | | | | |
| 12 | Wapen | 1.6 | 8,440 | 4 | 9.766 | - 5 | 11,162 | \$ | 29,308 | 5.15 | 1.20 | | | | |
| 13 | Office Expense | 5 | 981 | 5 | 1.127 | 5 | 1,295 | 5 | 3,404 | 0.7% | - | _ | | | |
| 14 | Ublities | 5 | 1,124 | 5 | 1.201 | 1.5 | 1.435 | 3 | 3.900 | 2.8% | | 1212 | 1 | | |
| 15 | Auto Expensive | 5 | 1,795 | 15 | 2.083 | 8 | 2.373 | 5 | 6,230 | 1.2% | | 18 | | | |
| 16 | Othen | | 1,420 | 1 | 1,783 | 4 | 1,555 | 4 | A.75a | 1.0% | | - | | | |
| 17 18 | Total Expenses | ş | 45,327 | ę | 53,423 | - | 60,940 | 8 | 160,691 | 82.2% | - | - | | | |
| 19 | Net Profit | \$ | 112,850 | \$ | 115,433 | \$ | 109,893 | \$ | 238,176 | 61.9% | | | | | |
| 20 21 22 23 | | | | | | | | | | | | | | | |
| 24 | R\SheetJ (Sheet2 /Sh | | | | | | | | Ja. | | | - | | | |

Toolbar



140

Check Macro Security Level

- 1. Choose Tools-⇒Macro-⇒Security. The Security dialog box shown in Figure 14-3 appears.
- **2.** Set a security level:
 - Very High: Allows you to only run macros that are stored in a trusted location. The Trusted Publishers tab lists all trusted locations.
 - High: You can run only those macros that are digitally signed. This is the default setting in Excel.



A digital signature is an electronic, encrypted, secure stamp of authentication obtained from a commercial certification authority. Excel's Visual Basic programming language contains a self-certifying digital signature tool, but because it doesn't come from a third party, Excel still considers it unauthenticated and displays a warning box.

- Medium: Excel displays a dialog box asking if you want to enable macros. If you are creating your own macros, you should probably choose this setting.
- Low: Allows macros to run without you being notified first. This can be helpful if you run a lot of macros, but be aware of the risk of using macros from unknown sources.



Select the Low setting only if you have virus scanning software that checks your Microsoft Office files or you open only workbooks that you know do not contain viruses.

- 3. Click OK.
- **4.** Close any currently open Excel workbooks. Depending on the setting you selected, when you reopen a file containing a macro, you may see the Security Warning dialog box, shown in Figure 14-4.
- *5.* Click the Enable Macros button if you know where the macro originated.

| Security | 2 🛛 |
|---|--------------------|
| Security Level Irusted Publishers | |
| Very High. Only macros installed in trusted locat to run. All other signed and unsigned macros ar | |
| O High. Only signed macros from trusted sources run. Unsigned macros are automatically disables | |
| Medium. You can choose whether or not to run macros. | potentially unsafe |
| Low (not recommended). You are not protected unsafe macros. Use this setting only if you have software installed, or you have checked the safe you open. | e virus scanning |
| | |
| ОК | Cancel |

Figure 14-3: The Security dialog box

| Security Warning | × |
|--|-------------------|
| "C:\MYFILES\EXCEL\Employee timecard1.xls" contains ma | cros. |
| Macros may contain viruses. It is usually safe to disable m macros are legitimate, you might lose some functionality. | acros, but if the |
| Disable Macros | More Info |

Figure 14-4: Macro warning box

Run a Macro

- 1. Choose Tools Acros Macros. The Macro dialog box, shown in Figure 14-5, appears.
- 2. Select the macro you want to run.
- 3. Click the Run button. Excel executes the selected macro.



Save your file before running a newly created macro. You cannot undo the macro.

Assign a Macro KeyStroke

- 1. Click Tools Acros Record New Macro.
- 2. In the Macro Name text box, type a name for the macro.
- **3.** Select where you want to store the macro from the Store Macro In drop-down list.
- 4. Type a description of the macro in the Description box.
- **5.** Assign a keystroke combination (see Figure 14-6). If you select a shortcut key already used in Excel, the macro shortcut overrides the Excel shortcut while the workbook that contains the macro is open.



If you enter a lowercase letter, Excel assigns it a Ctrl+lowercase letter combination. If you type an uppercase letter, you must press Ctrl+Shift+the letter to run the macro. The shortcut key cannot be a number or special character.

6. Click OK.

142

- **7.** Perform the actions you want to record and then click the Stop Recording button.
- 8. To execute the macro, press the shortcut key you assigned.



Figure 14-5: Select a prerecorded macro



Figure 14-6: Assign a shortcut key to a macro

Create a Macro Toolbar Button

- 1. Choose Tools Customize.
- **2.** Click the Commands tab. Then select Macros from the Categories list.
- **3.** Drag the Custom button from the Commands box to the toolbar on which you want to place it.
- **4.** Release the mouse button when the mouse pointer resembles a capital letter I like the one in Figure 14-7.
- *5.* With the new button selected, click the Modify Selection button in the Customize dialog box.
- **6.** Choose Assign Macro. The Assign Macro dialog box appears.
- **7.** Select the macro you want to assign to the toolbar button.
- 8. Click OK.
- 9. Click the Close button.
- 10. To run the macro, simply click the toolbar button.



Check out Chapter 15 for more information on customizing toolbars.

Stop a Macro

- 1. Press the Escape key. The Microsoft Visual Basic window opens (see Figure 14-8).
- **2.** Click the End button.



Hold the Shift key while starting Excel to prevent Excel from automatically running a macro.

| (Control) Suc Resput * Second Resput Sacon resigning II:10/2003 By 21866 Notice | • Macrol | |
|--|----------|--|
| Sector Berry | | |
| ActiveCell.FormalisMic(: "Apples" Range("20").Select ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" MactiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Commission" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: "Southpen" ActiveCell.FormalisMic(: Southpen" ActiveCell.FormalisMic(: Southpen" | | |
| | | |
| etrinkata:" | | |

Figure 14-7: Quickly access a macro by adding it to the toolbar

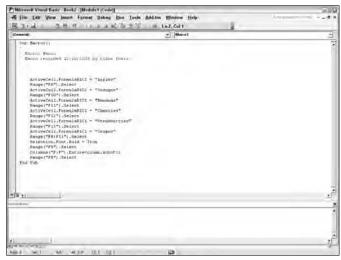


Figure 14-8: Stopping a macro

Delete a Macro

- **1.** Open the workbook containing the macro you want to delete.
- **2.** Choose Tools Acro Macros. The Macro dialog box appears (see Figure 14-9).
- **3.** From the Macro dialog box, select the macro name you want to delete.
- 4. Click the Delete button. A confirmation box appears.
- 5. Click Yes.



Deleting a macro does not remove any button you placed on the toolbar. To delete a button from the toolbar, choose Tools=>Customize and drag the button off the toolbar.

Delete a Personal Macro

- 1. Choose Window Unhide. The Unhide dialog box, shown in Figure 14-10, appears (unless the Personal Workbook already is displayed or you don't have any personal Macros).
- **2.** Choose Personal, then click OK. The Personal Workbook appears.
- **3.** Choose Tools Acros Macros. From the Macro dialog box, select the macro you want to delete.
- 4. Click the Delete button. A confirmation box appears.
- 5. Click Yes.
- 6. Choose File⇒Close. (You are closing the Personal Workbook.) A Save Confirmation dialog box appears.
- 7. Click Yes.

144

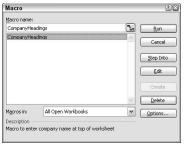


Figure 14-9: Select a macro to delete



Figure 14-10: Unhide the Personal Workbook

Saving Time with Excel Tools

This chapter is about stuff . . . Excel stuff. In the earlier chapters, I show how Excel has lots of power to make your computing life a little easier. This chapter contains a diverse group of Excel tools designed to speed up data entry and help improve spreadsheet quality.

In this chapter you discover how to

- Add special characters such as the copyright symbol, the registered trademark, foreign characters, or smiley faces.
- Create a custom toolbar where you can specify the tools you use most often.
- Split data into multiple columns where you can break up data containing multiple words such as a first name and last name; or city, state, and zip code into separate columns.
- ➡ Merge columns, which uses the Excel CONCATENATE function to combine data.
- Manage Excel's AutoCorrect feature, where you see how Excel automatically corrects many common misspelling or formatting issues.
- ➡ Work with *SmartTags*, those funny little indicators that often appear when you perform certain Excel functions or enter a particular type of Excel data.
- ➡ Let Excel flag potential formula errors and offer to correct them for you.

Chapter 15

Get ready to. . .

 → Add Special Characters
 146

 → Create a Custom Toolbar
 146

 → Split Data into Multiple Columns
 147

 → Merge Columns
 148

 → Manage AutoCorrect
 149

 → Check for Formula Errors
 149

 → Work with SmartTags
 150

Add Special Characters

- 1. Click where you want the symbol. Special characters can be in their own cell or amid other text or values.
- 2. Choose Insert Symbol. The Symbol dialog box appears (see Figure 15-1).
- 3. From the Symbols tab, click the symbol you want to use.



Different fonts display different symbols. If you don't see the symbol you want, select a different font from the Font drop-down list. Additional special characters are available on the Special Characters tab.

4. Click the Insert button. Excel inserts the symbol into the current cell. Click the Close button.

Create a Custom Toolbar

- 1. Choose Tools Customize. The Customize dialog box appears.
- 2. From the Toolbars tab, click the New button.
- 3. Enter the name you want to describe the new toolbar.
- 4. Click OK. A new blank toolbar appears on-screen.
- **5.** From the Commands tab of the Customize dialog box, select a category for the first tool you want to add. A list of available Excel commands appears on the right side of the dialog box (see Figure 15-2).
- **6.** Drag the command you want until it is on top of the new toolbar. When you release the mouse button, a button representing the command appears on the new toolbar.
- **7.** Click the Close button.

146



Figure 15-1: Insert symbols, such as the copyright character, into a cell

| G H J R L | M N O |
|---|--|
| | |
| 50 a command to a tookar select a cotegory and 0 ag the west out of the divide floor to a tookar. | |
| n J Nem. A | |
| dow and Help (a) Seve ang shapes (4) Save No (4) | |
| Beeringe Comenda | |
| Circ | |
| | |
| 一時 かけ や 肥ま やけ いはた りかわ | Ren: Community (press) add accomments (a cooper) and dray the ment of of the dada to its tanded: prover commands the second of the second of the second of the term of the second of the second of the second of the term of the second of the second of the second of the second of the term of the second of the s |

Figure 15-2: Create a customized toolbar

Split Data into Multiple Columns

- 1. Insert blank columns to the left of the cells you want to convert into multiple columns. If you want your data in three columns, then you must have two blank columns.
- 2. Select the cells you want to convert.



You can't split empty cells, and you can't split merged cells. You must first unmerge the cells. See Chapter 4 for information about merged cells.

- **3.** Choose Data Text to Columns. The Convert Text to Columns Wizard appears (see Figure 15-3).
- **4.** Select the Original data type that suits your date. The Delimited type works if your data has a similar format. If the cells all contain a specific number of characters, select the Fixed Width radio button.



If your data type is delimited, be sure that each section is separated by a common character such as a comma, period, apostrophe, or tab.

- **5.** Click Next. The option you see next depends on which data type you selected in Step 4. For Fixed Width, click the ruler bar where you want the data to split. For Delimited, enter the character you used to separate your text. In Figure 15-4, the text is separated by a space.
- *6.* Click the Finish button. Excel separates the selected cells into multiple columns.
- 7. Click OK.



To split data into two lines in the same cell, press Alt+Enter where you want to break the line.

| 330 - |
|---------------|
| 330 |
| <u>9</u> 00 |
| |
| |
| 1.1 |
| |
| frah 1 |
| Hand Hereinen |
| |
| |
| |
| |
| |
| |
| |

Figure 15-3: Convert text to multiple columns by specifying what separates the text sections

| - | ED + & Sin Marcut | 1 F 1 4 5 5 5 | 13.21.8.15 | | | | | |
|----|-------------------------------|-----------------|--|--|--|----------------|---|------|
| - | 6. + N+ Sult Marcas | D. D. | | C | I H | 1 | 31 | 10 |
| Ë | Company | Contact | | - | | | | 1.55 |
| | Downey Parts | Sue Marcus | | | - | | | |
| 5 | Eastern Land Management, Inc. | Karla McDowney | | | | | | |
| | First Hardware Supplies | Mesty Williams: | STREET, STREET, ST | Columns Witard . Stop | | _ | 0.00 | |
| ī, | Georgia Department of Revenue | Janice Wilcox | | the second second second | | | - una | |
| | Georgia Utilities Inc | James Smithers | This extentionity of the second secon | to a rest that childranes your state or effected to the prevent below. | orshalling. You call the | | 100 | |
| | Jackson Advertising Company | Karen Jackson | (COLORADO) | for an and the second sec | | | | |
| | Otturn Cleaning Services | Lewis Otturn | Onlinear | | Tenet Conservation | deletion acces | | |
| | RD Telecommunications | Robert Dagwood | | Segscolori Sciencia | | 1+ Ini | | |
| ò | Refine Garden Supplies | Darvin Mattin | Pigas | Den: | Text guariers | | 100 million - 100 million | |
| ļ | Viking Steel | Doug Adams | | | | | | |
| 2 | | | Destant | | | | | |
| 3 | | | and the second second | | | | 100 million | |
| 4 | | | Fue Barr | | | | 70 | |
| 0 | | | Barty Bill | | | | 2011 | |
| 7 | | | Janairs Miles | 18 | | | 1.1 | |
| 8 | | | Junes Dales | 41.1 | | _ | 177 | |
| ğ | 3 | | - Contraction of the local division of the l | | | | 0000 | |
| õ | | | 10.00 | [Ewol | - 5at 1 9 | NE - For | | |
| ĩ | | | | Construction of the second | and have been been been been been been been be | - Sec. | the second se | |
| ź | | | | | | | | |
| ŝ | | | | | | | | |
| í | | | | | | | | |
| ŝ | | | | | | | | |
| | | | | | | | | |
| ŝ | | | | | | | | |

Figure 15-4: Splitting data into multiple columns

Merge Columns

- 1. Click in the cell where you want the merged data.
- 2. Choose Insert Function.
- 3. From the Category drop-down list, choose Text.
- 4. Select CONCATENATE. (See Figure 15-5.)
- 5. Click OK. The Function Arguments dialog box appears.
- *6.* Type the first cell address or click the cell you want to add to the combination. Excel enters the cell address in the Text1 box.



Optionally, on any line, if you want specific text that's not in a cell address, type the text or punctuation, including any spaces. Excel places any spaces, punctuation, or text in quotation marks.

- **7.** In the Text2 box, click the cell or type the text you want next. Each element must go in its own Text box line. Figure 15-6 shows an example.
- 8. Click OK.



To convert the merged cells into plain text, instead of formulas, select the merged cells, choose Edit=>Paste Special, and then select Values from the Paste Special dialog box.



Optionally, use the ampersand (&) between cell addresses to join text items. For example, =A1&B1 returns the same value as =CONCATENATE (A1, B1). However, the cells you connect with the ampersand cannot be blank.

| | Something Street, | E. | | | | | | |
|----------------------------------|-------------------|----------------|-------------------------|--------------------------|-----------|--------|---|---|
| SLETOTAL • X J & = | 「美田」(こう)」 | 1 2 | · _ · A·, | 4.1 | | | | |
| D | E | F | G | H | T | 3 | K | E |
| 1 Mail to Address Line 1 Mail to | o City Mail | to State | Mail to Zip | 2 | | | | - |
| 2 5454 State Street Alpha | retta GA | | 30022 | = | | | | |
| 3 2905 Peachford Way Dulut | GA | | 30095 | | S | | | |
| 4 1202 Douglas Way Maco | n GA | | 31204 | | | | | |
| 5 5454 Trinity St Atlant | a GA | Insart F | unction | | | U.C. | | |
| 6 1505 Peachtree North Atlant. | a GA | Sinth | r abortos: | | | | | |
| 7 1458 Chaseway Orde Atlant | 8 GA | | street description of s | | | 1 | | |
| 8 3309 Venture Elvd Lawre | stcevile GA | and G | E Description to a | Within Adort New Add Con | ownerse [| - 10 | | |
| 9 1401 Peachtree Lane Atlant. | 8 GA | Cycham | t a Literative Test | | | | | |
| 10 8572 Halcyon Way Lawre | ncevile GA | Sente | | | - 25 | 1 | | |
| 11 3280 Park Lane Smyn | ia GA | Deect 41 | | | | 100 | | |
| 12 | | CH40 | | | | 2 | | |
| 13 | | CLEAN | | | | - 910 | | |
| 14 | | CONC | AVENANTE | | | | | |
| 15 | | POLLA | | | | inel (| | |
| 16 | | LINC | TENAIT(Lest).tes | (2) | | | | |
| 17 | | - 391.0 | THE R OLD HOLD THE | O HER STREET STREET | | 1 | | |
| 18 | | 1000 | | | | | | |
| 19 | | and the second | STREET. | - | | Cetari | | |
| 20 | | Salan | SULLANDALANT. | L. | a | CHERN | | |
| 21 | | - | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 34 25 76 | | | | | | | | |
| 25 | | | | | | | | |
| 76 | | | | | | | | |

Figure 15-5: Using a function to combine multiple columns into a single column

| Mail to Address Line 1 Mail to City Mail to State Mail to Zip 5455 State Street Alphanotta GA 50022 ==CONCATENATE(E2.* 1F2.* 1G2) 2050 Peactriced Way Duath GA 50025 ==CONCATENATE(E2.* 1F2.* 1G2) 5455 State Street Mail to State GA 51204 = 1202 Dougliss Way Maccin GA 51204 = 1505 Peactrice Notin Allanta GA Feddata Angeneme Edit 1505 Peactrices Notin Allanta GA Feddata Angeneme Edit 1505 Peactrices Notin Allanta GA Feddata Angeneme Edit 1505 Peactrices Laine Allanta GA Feddata Angeneme Edit 1401 Peactrices Laine Allanta GA Teat re Edit Teat re 1527 Padoyon Way Lawrent OA State re Edit Teat re Edit 1520 Park-Lane Smyrna GA Valto re Edit Teat re | ACATEMATE - X V A = CONCA | TERVIERS | 4 | | | | - | | | - |
|--|---------------------------|--------------|----|---------------|---|-------------------|----------------|-----------------------|-------|----|
| Afad State Store Afad State Store Afad Store Afad State Store Afad Store Afad State Store Afad Store | D | E | | F | G | H | 1 | a | 6 | L. |
| 2005 Peachtron Way Dualm CA Socies | | | | to state | | CONCATE | MATEIEZ | | | |
| 1202 Dougliek Way Maccin GA 51204 1505 Peachtree North Allanta GA Texcitiza Angereman 1505 Peachtree North Allanta GA Texcitiza Angereman 1505 Peachtree Line String Toto Biol Angereman Texcitiza Angereman 1505 Peachtree Line String Toto Biol Angereman Texcitiza Angereman 1505 Peachtree Line String Toto Biol Angereman Texcitiza Angereman 1505 Peachtree Line Allanta GA Texcitiza Angereman 1505 Peachtree Line String Toto Biol Angereman Texcitiza Angereman 1506 Peachtree Line Allanta GA Texcitiza Angereman 1507 Peachtree Line Allanta GA Texcitiza Angereman 1508 Peachtree Line | | | | | | -GUANCHIE | AMIEICZ. | - P2 | | |
| Adsaft minning S Advance Adv | | | | | 31204 | | | | | |
| 1005 Peschtree North Allanta GA 1496 Chasaway Orcle Allanta GA 1496 Chasaway Orcle Allanta GA 1496 Chasaway Orcle Allanta GA 1497 Peschtree Line Allanta GA 1697 21 Holyon Way Survey, evile GA 1572 Holyon Way Survey, eville GA 1572 Holyon Way Survey, eville GA 1572 Holy | | Atlantia | GA | Function | | | | | 12 | |
| 1458 Chaseway Circle Adarta GA Texts tr: Start - "Adareas" Texts tr: 1400 Feachtree Lane Adarta GA Inst: Start - "Adareas" Texts tr: 1400 Feachtree Lane Adarta GA Inst: Start - Texts tr: Start - Texts tr: 15220 Park Lane Smyrma GA Visit '- Start - Texts tr: Start - Texts tr: 1220 Park Lane Smyrma GA Visit '- Start - Texts tr: Start - Texts tr: 1220 Park Lane Smyrma GA Visit '- Start - Texts tr: Start - Texts tr: 1220 Park Lane Smyrma GA Visit '- Start - Texts tr: Start - Texts tr: 1220 Park Lane Smyrma GA Visit '- Start + Texts tr: Start + Texts tr: 1220 Park Lane Smyrma GA Visit '- Start + Texts tr: Start + Texts tr: 1220 Park Lane Smyrma GA Visit '- Start + Texts tr: Start + Texts tr: 1220 Park Lane Smyrma GA Visit '- Start + Texts tr: Start + Texts tr: 1220 Park Lane Smyrma GA Visit '- Start + Texts tr: Start + Texts tr: 1232 Park Lane Smyrma GA Visi | | Atlanta | GA | | | | | | 100 | |
| 1401 Peachtree Lane Alante GA 1572 Holoyov Way Laverenovide GA 13280 Park Lane Smyrma GA 1443 72 Smyrma GA 1443 72 Smyrma SA 1443 74 Smyrma S | 1458 Chaseway Circle | Atlanta | GA | | | | 17 | - "Acharama" | | |
| 1401 Peachtree Laine Abarta GA 1572 Halcyow Way, Laivencoville GA 3280 Park Lane Smyrma GA Visiti - 2 Ga Visiti - 2 Ga Are break tipti brog Mix one trial inno. TeedS tipti (Inno, und to Thing within a might of inference. TeedS tipti (Inno, und to Thing within a might of inference. Inno | 3309 Venture Btvd. | Lawrencevite | GA | | Tenta - | | 13 | 0 | 100 | |
| 16572 Haloyon Way Lowencovelle GA Singer A | | | | | Text 1/1 | | | | | |
| Califord in Lian in Stringtons Orie Area because that drong and one that drong in the drong in the drong in the drong in the greed the a single-term Tread Stabil Junic or I to White throug in the present drong budgets in: through because the drong in the present drong is used by a single-term through because | | | | 1 | Tatte | _ | | | | |
| Anno becare anticit diverge Anno operant drags - * fagementes, sist another TeedSt tees) and C and to "Maint shrough the present and a adapt term TeedSt tees) and C and to "Maint shrough term and adapt term TeesStatement = Apparents, Sis 2002* TeesStatement = Apparents, Sis 2002* | | Smyrna | GA | 1 | TANKO /IP | | 14 | and a support | | |
| Anna benere stigt bings zins gene text tang. FeedSi text) (and), and to 30 text storage to be predicted a page text and gene text in the storage is based on a storage of defension. Promulatered - shared to 3000 Compared and the storage of the | 3 | | | 1 | 10000 | | | | 10.20 | |
| TeedS (tota) (mod), use I by Nilant shoups in the presidence and the second sec | 5 | | | Sere bear | sitest brees stop | inter test an | | · Nonwina, G | 30022 | |
| ToddS (au) (au), we it to Viliat prove the prevention a support using actions is mining and cardio and action is mining and cardio and action of an formational and actional action action action action action action action into a laboration action | | | | - new setty | The second second | during a | | | 100 C | |
| Providerandi – Aphenesi, SA XXX2 maja attish kenani | | | | 100 | - | | | | | |
| Forsitarinab = Aphanetic GA 2002 | | | | | string and a | arise unit strang | a, insides, is | regin cell references | into: | |
| Ing at the function | | | | | | | | | | |
| | | | | - Contractory | 2 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M | sheer of 200 | | | | |
| E Contraction of the second seco | | | | 100010120 | la fuergates | | | <u></u> | and | |
| | L . | | | | T T | | | | - | |
| | 2 | | | | | | | | | |
| | | | | | 1 | | | | | |
| | | | | | | | | | | |

Figure 15-6: Concatenating text columns

Manage AutoCorrect

- 1. Choose Tools AutoCorrect Options. The AutoCorrect Options dialog box opens.
- **2.** Remove the check marks from any option you do not want Excel to automatically correct.
- **3.** In the Replace box, type a common typing mistake. For example, if you frequently type *profitt* instead of *profit*, type **profitt** in the Replace box.
- **4.** In the With text box, type the correct word (see Figure 15-7).
- 5. Click the Add button.



To remove any unwanted entry, select the entry and click the Delete button.

- 6. Click the AutoFormat As You Type tab.
- **7.** Remove the check mark from any feature you don't want Excel to automatically perform.
- 8. Click OK.

Check for Formula Errors

- Choose Tools
 ⇒Error Checking. Excel checks the current worksheet for formula errors and stops at the first error. As Figure 15-8 shows, the Error Checking dialog box offers several pieces of information including the cell reference containing the possible problem, a description of the possible problem, and a button to remedy the problem.
- **2.** Click the button that offers to remedy the problem or Next to leave the formula as is.
- 3. When the error checking is complete, click OK.



Figure 15-7: AutoCorrect Options

| Taho | F8 + | A AVERAL | | 21. P | 1 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | _· -· 4· | | | | | | |
|------|-------------|----------|----------|---------------------------|--|--------------|--------------|---|-----|-------|---|---|
| | 8 | В | E. | П | E | 1 | -G | 0 | 100 | 1.6.1 | ĸ | L |
| ì | | A | 3C PRODL | ICTION C | OMPANY | | | | | | | |
| 2 | | UNI | T SALES | BY SALE | SPERSO | 4 | | | | | | |
| a | | | | | | | | | | | | |
| | Salesperson | January | February | March | TOTAL | AVERAGE | RATIO | | | | | |
| | Weitzerw | 147 | 125 | 172 | -445 | 148 | 43% | | | | | |
| | Spender | 92 | 107 | 106 | 305 | 102 | 29% | | | | | |
| | TOTALS | 105 | 91 | 100 378 | 296 1.046 | 99 349 | 28% | | | | | |
| 1 | IUTALS | 344 | 324 | 3/8 | 1,046 | 349 | 100% | | | | | |
| 8 | | | Eno | Checking | | | | | | | | |
| 11 | | | 1.000 | P Land | | 1.0 | | - | | | | |
| 2 | | | -4 | ArnAzam 040 | | Copy Romail | a trons Feat | 4 | | | | |
| 9 | | | | manner Verselag | | the or M | vi itrrie | | | | | |
| 4 5 | | | (here | Consults to their call of | Franç Iroma Umr. | Enora | LUITY . | | | | | |
| | | | | | | Cdit in Ener | a la lar | | | | | |
| 7 | | | - | | | - des ribes | | | | | | |
| 8 | | | 12 | 100 million | | Ereview | in text | 7 | | | | |
| 9 | | | | | | | - | 1 | | | | |
| 1 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| a . | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 81 | | | | | | | | | | | | |

Figure 15-8: Check for potential errors

Work with SmartTags

- 1. Choose Tools AutoCorrect Options.
- 2. Click the SmartTags tab (see Figure 15-9).
- 3. Enable the Label Data with SmartTags option.
- 4. Click OK.



To have Excel notify you with a sound whenever a SmartTag appears, you must have Microsoft Office Sounds installed on your computer. Then choose Tools=>Options and from the General tab, select the Provide Feedback with Sound option.

- **5.** From the worksheet, click a SmartTag icon. Each SmartTag type appears with a different icon appearance including
 - **Paste:** These appear over pasted data (such as the one in Figure 15-10), offering options about pasting.
 - AutoFill: These appear after you fill data in a worksheet, offering how to fill the text or data.
 - **Insert:** These appear next to inserted cells, rows, or columns, offering a list of formatting options.
 - AutoCorrect: These appear as a small, blue box near text that was automatically corrected, offering to undo an AutoCorrect action.
 - Financial: These appear over a cell with a U.S. stock symbol and offers options to check stock prices. Financial SmartTags are indicated by a purple triangle in the lower-right corner of a worksheet cell.
 - Error Checking: These appear over potential formula errors in the same way as the Error Checking feature. Error Checking SmartTags are indicated by a small green triangle in the upper-left corner of a worksheet cell.



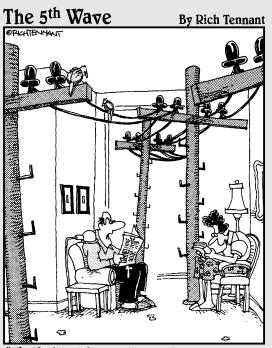
Figure 15-9: Enable additional SmartTags

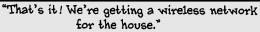
| And とうと変える画書構成ならい場合 105 - 10 | a contant | |
|---|---|--|
| Section Land Management Inc Varia McDowney First Hardware Supplies Many Wilkiam Cocorala Department of Revent Lances Wilkiam Georgia Data Department of Revent Lances Similars Cocorala Department of Revent Lances Similars Cocorala Department of Revent Cocorala Department of Revent Cocorala Department of Revent Cocorala Department Cocorala Department Cocorala Department Cocorala Department Cocorala Cocorala Cocorala Cocorala Cocorala Cocorala | 2505 Peachive Way 1207 Dougas Way 5454 Brindy Sa 1550 Peachive Sa 1550 Peachive Noth 1455 Chapeway Circie 3009 Vencas Biol 1401 Peachive Lane 572 Paloyon Vey 3250 Part Lane | E Dalett, GA 30095 Misson, GA 31204 Atamte, GA 3002 Abarde, GA 30203 Abarde, GA 30203 Lawrencoville, GA 30204 Lawrencoville, GA 30204 Lawrencoville, GA 30204 |
| Bestarn Land Management, Inc Trietk Hardwes Supplies Goorgia Department of Revenue Goorgia Department of Revenue Jackston Advertising Company Othum Cleaning Services Rofte Garden Supplies Refne Garden Supplies Refne Garden Supplies Keep Sumce Callen Keep Sumce | fag . | |
| 17 17 17 17 + H∖Vendor Int/ Jopan+ · · AntoShaped- ∖ ∿ □□ ≤ # ⊡ ≤ ₂ >+ ₂- ∆ | B. | |

Smart Tag icon
Figure 15-10: Paste SmartTag options



Part V Practical Applications for Excel





| Chapter 16: Creating a Commission Calculator | 153 |
|--|-----|
| Enter Headings | 154 |
| Create the Commission Table | |
| Define the Sales Data Input Area | 155 |
| Total Sales with the SUMIF Function | 155 |
| Use the COUNTIF Function to Count Sales | 156 |
| Calculate Commission with | |
| a Nested IF Statement | 156 |
| Create Totals | 157 |
| Make It Look Nicer | 158 |
| Protect Your Work | 158 |
| | |

Chapter 17: Tracking Medical Expenses159

| Enter Text Headings | 160 |
|--|-----|
| Create Totaling Formulas | 160 |
| Calculate the Amount Due | 161 |
| Specify Data Validation | 161 |
| Format the Worksheet | |
| Determine Print Settings | |
| Add Protection from Accidental Changes | |
| Duplicate the Worksheet for | |
| Other Family Members | |
| Create a Totals Worksheet | |
| Save the Workbook as a Template | |
| • | |

Chapter 18: Planning for Your Financial Future167

| Plan for a House | 168 |
|--|-----|
| Prepare To Pay Off a Credit Card Balance | 169 |
| Save for College or Retirement | 170 |

| Chapter 19: Integrating Exel into Word171 |
|--|
| Copy Excel Cells into Word172 |
| Insert a Saved Excel Worksheet into Word173 |
| Edit the Inserted Worksheet173 |
| Embed an Excel Worksheet into Word173 |
| Copy a Word Table to Excel |
| Create a Word Mail Merge Form Letter |
| Using an Excel List |
| Make Mailing Labels178 |
| Chapter 20: Blending Excel and PowerPoint179 |
| Copy Excel Cells into a PowerPoint Slide180 |
| Drag an Excel Chart into a PowerPoint Slide181 |
| Insert a Saved Excel Worksheet or |
| Chart into a PowerPoint Slide182 |
| Link an Excel Worksheet into |
| a PowerPoint Slide |
| Chapter 21: Using Excel with Access |
| Copy Data from Excel to an Access Table186 |
| Import Data from Excel to an Access Table |
| Link an Excel Worksheet to |
| an Access Database190 |
| Analyze Access Data with Microsoft Excel191 |
| Export Access Data to Excel192 |

Creating a Commission Calculator

Suppose you're a business owner and you pay your salespeople a sliding commission rate based on their total sales for a specified period, such as a month. First, you need a sheet of paper to list each salesperson's sales. Then, at the end of the period, you have to subtotal each person's sales. Finally, you have to figure out which percent commission to give based on that subtotal.

With a Commission Calculator worksheet, designed with the use of basic Excel features, as well as using several Excel functions (SUMIF, COUNTIF, and nested IF statements), all you have to do is enter the individual sales. Excel does the rest for you, saving you precious time and reducing the chance for human error. To set a worksheet up, you do the following tasks:

- ➡ Enter basic headings
- ➡ Create a sliding commission rate table
- Define the data input area where you track the individual sales
- Design the calculation area where Excel calculates the totals and commission
- Enhance the worksheet appearance so it's easier to read
- Protect and save the worksheet as a template



Get ready to. . .

| → Enter Headings | 154 |
|--|-----|
| | 154 |
| ➡ Define the Sales Data Input Area | 155 |
| Hotal Sales with the SUMIF Function | 155 |
| ➡ Use the COUNTIF Function to Count Sales | 156 |
| Calculate Commission with a Nested IF Statement | 156 |
| 🗝 Create Totals | 157 |
| ┉→ Make It Look Nicer | 158 |
| ➡ Protect Your Work | 158 |

Enter Headings

- 1. In cell A1, type Commission Calculator.
- **2.** In cell A2, type For the month of:.
- **3.** In cells A3, B3, C3, and D3, type the following column headings: **Sales Person**, *#* **of Sales**, **Total Sales Amount**, and **Commission Amount**.
- **4.** Move down enough rows to accommodate all your salespeople's names, plus a couple of extra rows, and in column A of the row, type **Totals**.
- *5.* Beginning with cell A4, moving down the column, list the names of your salespeople.
- **6.** Move down three more rows and type the following column headings: **Sale Date**, **Transaction Number**, **Sales Person**, **Sale Amount**. Your worksheet should look like Figure 16-1.

Create the Commission Table

- 1. In an unused area of the worksheet, enter your sales dollar breakdown.
- **2.** In the cells next to the sales dollar breakdown, such as in cells L4, L5, L6, and so forth, enter the commission percentage.
- 3. Format the sales dollar values as currency (see Chapter 4).
- 4. Format the commissions as percentages (see Figure 16-2).
- Select the commission table and choose Inserts Name Define. The Define Name dialog box appears.
- *6.* Type **CommissionTable** or another name for the table.
- 7. Click OK.

154

| a) a) (1 a) (1 a) (2 b) (1 a) (2 a) | • • • |
|--|-------|
| A B C D E F G H I I I ommission Calculator is the involved bits Pers # of Sales Total Sales Commission and bits I | |
| Internation Calculator Internation Calculator Internation Calculator Internation Internati | |
| at the month of alse Pars # of Sales. Total Sales Commission ath wants nes semantry. Chants own: | 1 |
| tele Pars # of Sales. Total Sales Commission oth wants semathy | |
| nuh wards nes samathy chals own | |
| Wends Pres Pres Pres Pres Pres Pres Pres Pre | |
| nes Isrnathy Chailte Own Calis | |
| iannahy. Chaola owr | |
| chaols over tais | |
| tais | |
| tais | |
| | |
| | |
| sle Dide Transactio Sales Persi Sale Amount | |
| de Date Transactio Sales Persi Sale Amount | |
| se Date TransactionSales Piers Sale Amount | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| N\59net1 (Shad2 /Shad3 / | - 3 |
| | 1 |
| AlleShapes A A D D A 4 D (B A) A 2 · A · A = E A B | |

Figure 16-1: Enter headings for a commission worksheet

| Artel | | + to + 1 | | | | | tani÷ni Or•∆• | · | | | | |
|--------|-----|---------------|--------|-----|-------|--------------|------------------|---|---|---|---|--------|
| | a i | - K G | н | - 1 | - | Ŕ | 1 | M | N | 0 | P | - |
| 1 | - | ~ | 2.0 | _ | _ | | 1 | | | | | - |
| 2 | | | | | | Transform Te | | | | | | |
| 3 | | | | | Tota | | Rate | | | | | |
| 4 | | | | | \$ | <1,000 | 396 | | | | | |
| 5 | | | | | \$ | 1,000 | 5% | | | | | |
| 6 7 | | | | | 1 | 5,000 | 94No / | | | | | |
| | | | | | 5 | 10,000 | 10% | | | | | |
| 0. | | | | | - | | | | | | | |
| 10 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| tB | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 26 | - | 11 (Seet2 / 5 | i an i | | | | 14 | | | | | - 13-1 |

Figure 16-2: Create a commission table

Define the Sales Data Input Area

- At the bottom of the worksheet where you will enter the individual sales, select the cells in the Salesperson column. In Figure 16-3, I selected cells C15 through C114, which gives room for 100 sales entries.
- 2. Choose Insert与Name⇒Define. The Define Name dialog box appears.
- 3. Type SalesRep for the range name; then click OK.
- **4.** In the same worksheet section, select the cells you will use in the Sales Amount column. Be sure to include the same number of cells you included in Step 1.
- **5.** Choose Insert⇔Name⇔Define. The Define Name dialog box appears.
- 6. Type SalesAmt for the range name; then click OK.



To verify the formulas you create in the next several sections, enter some sample data in the sales data input area.

Total Sales with the SUMIF Function

 In cell C4, enter the following formula and then press Enter: =SUMIF(SalesRep,A4,SalesAmt). If you entered sample data in the sales data input area, you see the total sales for the salesperson.



The Excel SUMIF function calculates the totals of numbers that meet specified criteria. The function first asks for the area you want to look at, then the cell it should look to match, and finally the amount you want the function to total.

2. Copy the formula in C4 to the end of your salesperson list (see Figure 16-4). Chapter 2 shows how to copy formulas.

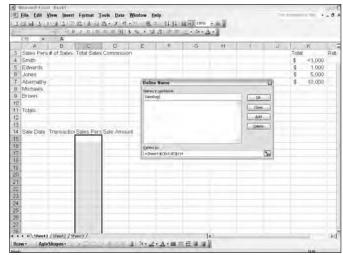


Figure 16-3: Define the sales person data input area

| 10031012201 | LUANJ MA - B | | | | | a monthly live lives | 0 |
|----------------------------------|--------------------|---------------------|-----|---|-----|----------------------|------|
| | I Bep Al SalesAmt) | 2 A 07 87 2 - 2 - 2 | Ard | | | | |
| A B C | | F S | н | 1 | -st | К | 1.5 |
| 3 Sales Pers # of Sales Total | | | _ | | | Total | Rat |
| | 44 65 | | | | | \$ <1,0 | 30 |
| 5 Edwards | | | | | | \$ 1,00 | |
| B Jonet | | | | | | \$ 5,0 |)0 |
| 7 Abernathy | | | | | | \$ 10,0 | 50 |
| 8 Michaels | | | | | | | |
| B Brown | | | | | | | |
| 10 | | | | | | | |
| 11 Totals | - 184 | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 Sale Date Transaction Sales | | | | | | | |
| 15 01-Nov. 1458 Smith | 1352.64 | | | | | | |
| 16 02-Nov 1459 Smith | | | | | | | |
| 17 02-Nov 1460 Jone | 133.57 | | | | | | |
| 18 02-Nov 1461 Micht | sels 6400-03 | | | | | | |
| 19 03-Nev 1462 Brown | | | | | | | |
| 20 03-Nov 1463 Jone | 5 316.94 | | | | | | |
| 21 03-Nov 1464 Smith | 3250 11 | | | | | | |
| 22 03-Nov 1465 Brow | 1 4100.13 | | | | | | |
| 23 04-Nov 1466 Brow | n 1804.7.2 | | | | | | |
| 24 04-Nov 1457 Edwa | nds 754.99 | | | | | | |
| 25 07-Nov 1468 Brown | n 3460.22 | | | | | | |
| 26 07-Nov 1469 Edwa | nts 832 64 | | | | | | |
| 27 | | | | | | | |
| 28 | | | | | | | - 34 |
| + + + +\sheet1 (sheet2 /sheet3 / | 03400315. | | | | | | - 34 |
| Draw - AutoShapes - A | | | | | | | |

Figure 16-4: Copy the formula down the rows

Use the COUNTIF Function to Count Sales

1. In cell B4, enter the following formula, then press Enter: =COUNTIF(SalesRep,A4). If you entered sample data in the sales data input area, you see the total number of sales for the salesperson.



The Excel <code>COUNTIF</code> function counts the number of entries that meet specified criteria. The function first asks for the area you want to look at, then the cell it should look to match.

- 2. Select cell B4 and choose Edit Copy.
- 3. Highlight cells B5 through the end of your salesperson list.
- **4.** Choose Edit⇔Paste. Excel duplicates the formulas to include all the salespeople. (See Figure 16-5.)

Calculate Commission with a Nested IF Statement

 In cell D4, enter the beginning function and the first parameter to check the total sales for the sales person against the commission table. Type =IF(C4<\$K\$5 and a comma.



156

If you created your commission table in a different location, change the cell references to match your commission table.

Be sure to place the dollar signs in front of the cell references to make them an absolute reference to a specific cell.

2. Enter the first True result. Type C4*\$L\$4 and a comma.

| Elle Edit V | 1117 | ALA-4 | J 47 - | - 8.3 | E-01(11) | | | | a summer la fact | 0 |
|------------------------|-------------------|---------------|-------------|-------|-------------|----|---|---|------------------|-----|
| 8à 🛩 | | UNTIFISAtesRe | | | 44 . AP - D | - | | | | |
| .R. | B | 6 | D | E | F | 6 | н | 1 | K | 1 |
| | # of Sales | Total Sales | Commission | | | | | | Total | Rat |
| 4 Smith | 3 | 5344.65 | | | | | | | \$ <1,00 | 6 |
| 5 Edwards | 2 | 1587.63 | | | | | | | \$ 1,00 | |
| B Jones | 2 | 450.46 | | | | | | | \$ 5,00 | |
| 7 Abernathy | | D | | | | | | | \$ 10,00 | 0 |
| 8 Michaels | 1 | 6400.03 | | | | | | | | |
| 9 Brown | 4 | 10865.07 | | | | | | | | |
| 10 | | 0 | | | | | | | | |
| 11 Totals | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| | | | Sale Amount | | | | | | | |
| 15 01-Nov | 1458 | | 1352.64 | | | | | | | |
| 16 02-Nov | 1459 | | 741.9 | | | | | | | |
| 17. 02-Nov | 1460 | | 133.57 | | | | | | | |
| 18 02-Nov | | Michaels | 6400 03 | | | | | | | |
| 19 03-Nev | 1462 | Brown | 3500 | | | | | | | |
| 20 03-Nov | | Jones | 316.94 | | | | | | | |
| 21 03-Nov | | Smith | | | | | | | | |
| 22 03-Nov | 1465 | | 4100.13 | | | | | | | |
| 23 04-Nov | 1466 | | 1804 7.2 | | | | | | | |
| 24 D4-Nov | | Edwards | 754 99 | | | | | | | |
| 25 07-Nov 26 07-Nov | | | 3460 22 | | | | | | | |
| 26 07-Nov | 1469 | Edwants | 632 64 | | | | | | - | |
| 28 | Inners Inn | with Z. | | _ | _ | 14 | | | | 1.0 |
| | | | 40.03 | 15.2 | · A · == | | | | | - |
| nork | 1.1.1.1.1.1.1.1.1 | | | - | - | | 1 | | 14.84 | |

Figure 16-5: Copy the formula throughout the rows

| | ile Edit View | Contraction of the | April and a second second second | Data Window | Help | | | | | | . 4 1 |
|------|---------------|--------------------|----------------------------------|---|-----------|------------|-----------------|------------------|---------------|-------|-------|
| - | 141 | 17/11 | A-12- | 116-2-1 | E - 113 | 1431 | 100.0 | | | | |
| ė | 22 | | | Contraction in the | | | 1.0 | | | | |
| - | L X - 14101 | B) AFCARS | dis cardiale ca | *\$L\$4.F(C4+\$K\$6 | Acres and | | | | | | |
| | A | В | C | D | E | F | G | н | 1 | 1 | |
| 1 | Commission | Calculate | DF | | | | | | | | |
| 2 | For the mont | th of. | | | | | | | | | |
| 3 | Sales Pers# | of Sales | Total Sale | Commissio | n Amount | | | | | | |
| 4 | Bob | 1 | 794 | =IF(04 <sk< td=""><td>55,C4*SL</td><td>55.C4*SL54</td><td>.IF(C4<5%</td><td>\$6.</td><td></td><td></td><td></td></sk<> | 55,C4*SL | 55.C4*SL54 | .IF(C4<5% | \$6. | | | |
| 5 | Tom | 1 | 1362 | | | | Tribigiol test, | waker # tose] [1 | ale F (ale 3) | | 1 |
| 6 | Sue | 2 | 7280 |) | | | | | | | 1 |
| 7 | Harry | 0 | (|) | | | | | | | 1 |
| 8 | Donna | 0 | C |) | | | | | | | |
| 9 | Julia | 0 | (|) | | | | | | | |
| 10 | 1 million | | | | | | | | | | |
| 11 | Totals | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | | | | | | | | | | |
| 14 | Sale Date Tr | ransactio | Sales Per | sale Amou | nt | | | | | | |
| 15 | 15-Dec | 1234 | Bob | 794 | | | | | | | |
| 16 | 14-Dec | 8585 | Tom | 1362 | | | | | | | |
| 17 | 16-Dec | 3211 | Sue | 4120 | | | | | | | |
| 18 | 16-Dec | 3213 | Sue | 3160 | | | | | | | |
| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 21 | | at I to and | 1 | _ | | | | | | | - |
| Dear | | | | 1.3. | 2.4.8 | | | | | | |
| 1 | | | | - DEA | - | | B . | | ine. | 14.44 | |

Figure 16-6: Beginning a nested IF statement

- **3.** Enter the first False result that begins another IF statement. Type IF(C4<\$K\$6 and a comma (see Figure 16-6).
- 4. Enter the next True result. Type C4*\$L\$5 and a comma.
- Enter the next False result that again begins another IF statement. Type IF(C4<\$K\$7 and a comma.
- **6.** Enter the third True result, if applicable. Type C4*\$L\$6 and a comma.
- **7.** Enter the third False result, which in my example is the last level to check. Type C4*\$L\$7.
- 8. Type three closing parentheses, enough to match the number of opening parentheses and press Enter. Figure 16-7 illustrates the final formula and its results.
- 9. Copy the formula to the other rows.



The Excel IF function evaluates a condition you specify, and returns one value if the statement is TRUE and another value if it evaluates to FALSE. In this example, if the sales are less than the first commission level, making the first condition TRUE, it calculates the sales multiplied by the first level commission percentage. If the statement is not TRUE, then Excel checks if the sales are less than a second commission level, and if so, it multiplies the sales times that commission level percentage. The nesting continues until Excel checks all commission levels, resulting in a commission amount.

Create Totals

- 1. In cell B11, or the cell below your last sales rep, create a SUM function to total the cells above it. In Figure 16-8, the formula =SUM(B4:B10) totals the sales orders.
- 2. Select the formula in cell B11 and choose Edit Copy.
- **3.** Select the cells C11 and D11 and choose Edit Paste. Excel duplicates the formulas, which total the sales and commissions, respectively.

| 1-43-14 | insert Form | 1-1-1 | and the second | E-1111 | 400 | | | ~****** | m= +. | |
|--------------------|--------------|--|--|----------|--------|----|---|---------|--------|-----|
| Trues How Format + | ******* | And in case of the local division of the loc | 9] \$ + 1 1-9-56 C490 56 F | -1 OF 18 | | | | | | |
| A | B | C | D | E | F | G | н | 1 | J | - D |
| 3 Sales Pers | # of Sales T | otal Sale | Commission | | | | | | | |
| 4 Smith | 3 | the second second second second | 374.1255 | | | | | | | |
| 5 Edwards | 1 | 1587.63 | | | | | | | | |
| 6 Jones | 2 | 450.46 | | | | | | | | |
| 7 Abernathy | 0 | 0 | | | | | | | | |
| 8 Michaels | | 6400.03 | | | | | | | | |
| 9 Brown | 4 | 10865.07 | | | | | | | | |
| 10 | 0 | 0 | | | | | | | | |
| 11 Totals | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 Sale Date | Transactio S | ales Pers | Sale Amount | | | | | | | |
| 15 01-Nov | 1458 S | mith | 1352.64 | | | | | | | |
| 16 02-Nov | 1459 S | mith | 741.9 | | | | | | | |
| 17 02-Nov | 1460 J | ones | 133.52 | | | | | | | |
| 18 02-Nov | 1461 N | lichaels | 6400.03 | | | | | | | |
| 19 03-Nov | 1462 B | rown | 1500 | | | | | | | |
| 20 03-Nov | 1463 J | ones | 316.94 | | | | | | | |
| 21 03-Nov | 1464 S | mith | 3250.11 | | | | | | | |
| 22 03-Nov | 1465 B | rown | 4100.13 | | | | | | | |
| 23 04-Nov | 1466 B | | 1804.72 | | | | | | | |
| 74 RA.New | 1467 F | duarde_ | 754.99 | _ | 14 | | | | | a. |
| | | 0840 | 11 31 51 2 | | nea al | | | | | |
| | | | and the second | | | 5. | | | 114.84 | |

Figure 16-7: A completed nested IF statement

| duset 31 | | + D J | | 日本ニ・コ | 13 9.9 | 1-2-2 | 12 | | | |
|-------------|-------------|----------|------------|-----------|--------|---------|------|---|---|---------|
| | A | B | C | D | E | F | G | н | 1 | 3 |
| 3 8 | Sales Per# | of Sale: | Total Sale | Commissio | n | | | | | |
| 4 5 | Smith | 3 | 5344.65 | 374.126 | | | | | | 5 |
| 5 8 | Edwards | 2 | 1587.63 | 79.3815 | | | | | | |
| 6. | lones | 2 | 450.46 | 13.5138 | | | | | | |
| 7 / | Abernathy | 0 | 0 | 0 | | | | | | |
| 8 1 | Vichaels | 1 | 6400.03 | 448.002 | | | | | | |
| 9 8 | Brown | 4 | 10865.1 | 1086.51 | | | | | | |
| 10 | | 0 | 0 | 0. | | | | | | |
| 11 | Totals | 12 | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 8 | Sale Date T | ransacti | Sales Per | Sale Amou | nt | | | | | |
| 15 | 01-Nov | 1458 | Smith | 1352.64 | | | | | | |
| 16 | 02-Nov | 1459 | Smith | 741.9 | | | | | | |
| 17 | 02-Nov | 1460 | Jones | 133.52 | | | | | | |
| 18 | 02-Nov | 1461 | Michaels | 6400.03 | | | | | | |
| 19 | 03-Nov | 1462 | Brown | 1500 | | | | | | |
| 20 | 03-Nov | 1463 | Jones | 316.94 | | | | | | |
| 21 | 03-Nov | 1464 | Smith | 3250.11 | | | | | | |
| | n fineis/am | 119-65 | r - | | | 1 | A.1. | _ | _ | 1341 |
| Denne | AutoShape | 4• × 4 E | 109.40 | 11 3 2.2 | · A+= | - E H H | 1 | | | |
| ALC: NOT | | | | | | | | | | 118.841 |

Figure 16-8: Totaling the sales items

Make It Look Nicer

- 1. Apply currency number formatting to cells with currency.
- 2. Widen columns to allow all cell data to appear.
- 3. Bold the headings.
- 4. Make the headings a larger font.
- 5. Apply borders as desired.
- 6. Merge and center cells A2 and B2.
- 7. Click the Right Align button to right align the data.
- 8. Merge and center cells C2 and D2.
- *9.* Click the Left Align button to left align the data.
- *10.* Add a light color shading to every other row as shown in Figure 16-9.
- **11.** Choose Tools Options. From the View tab, remove the check mark from the Zero Values option.

Protect Your Work

- 1. Select the cells in which you will enter the entry month and the sales data.
- 2. Choose Formats Cells.
- **3.** On the Protection tab, deselect the Locked option (as shown in Figure 16-10) and click OK.
- **4.** Choose Tools[↓]Protection[↓]Protect Sheet.
- 5. Click OK.



Save the worksheet as a template to protect it from changes. (See Chapter 7.)

| | licement Excel Bin File Edit View | | a that there is | | | | | | | | |
|-------|--------------------------------------|-------------|---------------------------------------|-------|-------------------------|--|---|---|---------|-----|---|
| 2 | File Coll View | Insert Form | Contraction of the second of | 10.00 | ew Help ⊛ E - 11 fl) | An UNIT AND A DOWN | | | | 0 | |
| 4110 | and a state | 7.5.6 | 1 3 4 4 | - | 1月1日 御御 | - 3- 4-2 | | | | | |
| 21)0 | A5 * | & Envirts | 1000100100.000.0211.3 | - | 1 34 21 36 36 | | | | | | |
| - 1 | | -8 | -6 | - | D | E | F | 0 | 1 1 | 1 | i |
| - | Co | mmissi | on Calcula | to | | ~ | | | | _ | |
| - | | | | | | | | | | | |
| 2 | | | f: Novemb | | | | | | | | |
| 3 | Sales Person | # of Sales | | 0 | ommission | | | | | | |
| 40 | Smith | 3 | 5,344 65 | £ | 374 13 | | | | | | |
| 夏 | Edwards | 2 | 1,587.63 | | 79 38 | | | | | | |
| 盲 | Jones | 2 | 450.48 | | 13:51 | | | | | | |
| 7 | Abumelby. | | | | | | | | | | |
| 9 | Nectools | 1 | 6,400.03 | | 448.00 | | | | | | |
| 8 | Brown | 4 | 10,865.07 | | 1,086.51 | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | Totals | 12 | \$ 24,647,84 | \$ | 2,001.53 | | | | | | |
| 17 | | | | | | | | | | | |
| 13 | | | | _ | - | | | | | | |
| 烈. | Sale Date | Transaction | | | ale Amount | | | | | | |
| 15 | 01-Nov | 1458 | Strift | 1.5 | 1.352.64 | | | | | | |
| 佰 | 02-Nov | 1459 | Smith | 5 | 741.90 | | | | | | |
| 17 | 02-Nov | 1460 | dones | 1.5 | 133.52 | | | | | | |
| 10 | 02-N(w | 1461 | Michaels | 1 | 6,400.03 | | | | | | |
| 11 | 03-Nov | 1462 | Ekken | 3 | 1,500.00 | | | | | | |
| 20 | 03-Nov | 1463 | Jones | \$ | 346.94 | | | | | | |
| 21 | 03-N/w | 1464 | SWA | 5 | 3,250.11 | | | | | | |
| 22 | 03-INOV | 1465 | Exam | 4 | 4,100.13 | | | | | | |
| 23 | G-d-Aday | 1465 | Erawn | 8 | 1,604.72 | | | | | | |
| 24 | 04 Nov | \$467 | Edwards | \$ | 754.99 | | | | | | |
| 26 | 07.N/W | 1468 | Fitter | 5 | 3460.22 | 141 | | | | 140 | i |
| Dra | | | 0540.00 | 11.0 | | | | | | | 1 |
| wise. | M. Allingard | C. C. L.L. | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | 11 11 14 14 14 14 14 14 14 14 14 14 14 1 | | | 14.44 | | |
| | | | | | | | | | 10.00 | | |

Figure 16-9: Alternate row shading makes a spreadsheet easier to read

| 41 | | + D J Q | 005 | 2 | 1.2.2.0 | 1 - 3- A- | | | | | |
|-----|--------------------|-------------|----------------|-----|------------|--|--------------------|-------------------|-------------|------|---------|
| 1 | | B | 5 | | D | E | F | 0 | H | 1 | 1 4 7 |
| ŝ | Col | mmissi | on Calcula | tor | | E | | | | | |
| - | For the m | onth of | : Novembe | er. | 2005 | Format Calls | | | | L La | |
| 4 | Sales Person | # of Sales | | | ommission | Maile Against | row finds | (beten | Poledin | 1 | |
| 8 | Smith | 2 | 5.344.65 | - | 374 13 | and the second s | | | | | |
| - | Edwards | 2 | 1.587.63 | - | 79.38 | - Loden | | | | | |
| 1 | dones | 2 | 450.45 | | 13.51 | C. C. Barret | | | | | |
| 7 | Abemelby | | | | | and the second s | Sec. Station | | | | |
| ġ. | Michaels | 1 | 6,400.03 | | 448.00 | convergiones de facting fue manifighenes as personnants et la | to provert the way | Addand, officiant | | | |
| 8 | Brown | 4 | 10,885.07 | | 1,086.51 | Shukaction from time Tools Shuket, is plansworth in cost | | deate trated | | | |
| 10 | | | | | | a second free of the | | | | | |
| 11 | Totels | 12 | \$ 24,647.84 | \$ | 2,001.53 | | | | | | |
| 12. | | | | | | | | | | | |
| 13 | Sale Date | Transmitter | # Sales Person | | ale Amount | | | | | | |
| 10 | 01-Nov | 1458 | Smith | 15 | 1.352.64 | | | | | | |
| 16 | notation. | 1450 | Smith | 5 | 741.99 | | | | | _ | |
| 17 | 02.Nov | 1460 | Jones | 1 | 133.57 | 6 | | 1.08 | IL-De | 1.1 | |
| ii. | 02-Nov | 1461 | Nichaels | 3 | 6 400 03 | | | | al Conteros | | |
| î | 03-Nov | 1462 | Erown | 3 | 1,500,00 | | | | | | |
| 20 | 03-Nov | 1463 | Jones | 5 | 516.94 | | | | | | |
| 21 | 03-N/w. | 1464 | Smith | 5 | 3,250.11 | | | | | | |
| 22 | 03-Nov | 1465 | Eltown | 4 | 4,100.03 | | | | | | |
| 73 | G4-Novi | 1466 | Erewyei | 3 | 1,804.72 | | | | | | |
| 24 | 04-Nov | 1467 | Enwirds | \$ | 754.99 | | | | | | |
| 25 | · · · Sheets / she | 1468 | Etown | 5 | 3.460.22 | tat | | | | | and the |

Figure 16-10: Unlock only the cells in which you want users to enter data

Tracking Medical Expenses

With today's high cost of medical care, very few of us can be without medical insurance. In fact, many of us have two insurance companies, perhaps Medicare and a supplemental insurance, or insurance through your employer and your spouse's employer.

Tracking medical costs is very important, especially when filing your annual tax return. In this project, you create an Excel spreadsheet that efficiently tracks your expenses, generating totals, even sorting out prescriptions from the rest of the medical expense totals. See at a glance how much your medical expenses total, how much is paid by your insurance companies, and — most important of all — how much you have to pay out of your pocket.

To accomplish this task, you use a number of Excel features including data validation, duplication of worksheets, creating totals from other worksheets, and a few Excel mathematical functions, too.

Hopefully your health is well and you won't need to use this worksheet a lot! But if you do . . . you'll be glad it's here.

Chapter 77

Get ready to . . .

| → Enter Text Headings160 |
|---|
| |
| HTTP://www.calculate the Amount Due |
| |
| → Format the Worksheet162 |
| > Determine Print Settings162 |
| Hand Add Protection from Accidental Changes 163 |
| Duplicate the Worksheet for Other Family Members |
| > Create a Totals Worksheet |
| ➡ Save the Workbook as a Template166 |
| |

Enter Text Headings

- 1. In cell A1, enter a heading for the worksheet.
- **2.** In cells B4 and B5, type **Total Billed** and **Total Paid by Insurance**, respectively.
- **3.** In cells D4 and D5, type **Total Paid Out of Pocket** and **Total Due**, respectively.
- 4. In cell D7, type Totals.

160

5. In cells A8 through K8, type the following: Bill Date, Provider, Rx?, Description of Services, Total Amount Billed, Insurance #1 Paid, Insurance #2 Paid, Write Off, Paid Out of Pocket, Check Number, and Amount Due. Your worksheet should look similar to Figure 17-1.

Create Totaling Formulas

- In cell E7, enter a formula to calculate the entire Total Amount Billed column =SUM(E9:E50). Make the formula longer or shorter depending on such as the items you have.
- **2.** Select cell E7 again, and grab the AutoFill handle and drag across to cell K7. This duplicates the formula from F7 through K7. (See Figure 17-2.)
- 3. Select cell J7 and press Delete to delete the formula.
- **4.** In cell C4, which references the total amount billed shown in cell E7, type =E7.
- **5.** In cell C5, type **=F7+G7**, which adds the insurance payments together.
- **6.** In cell E4, type **=I7** to reference the total out of pocket expenses.
- 7. In cell E5, type =K7 to reference the total still due.

| 1 3 4 3 And 13 A 1 205 Medica 7 2 4 T | 40 + 11 + 40 + 11 - A B C H Bill Tracking | | . 1 | 18. x - 11 1 21 (R | 11 14 (45) 100% (R) _ + Or + 2 | | | | et erson für fir | |
|---|---|-----------------|-------------------|-----------------------|-----------------------------------|--------------------|----|---|------------------|---|
| A 2005 Medica 2 2 4 | B C I Bill Tracking | D | E F | I P | | | | | | |
| 1 20,5 Medica 2 3 4 T | el Bill Tracking | 0 | E 1 F | | H lo lo lo | 3 6 | 1 | M | N | 0 |
| | | | | | | - | - | m | | 0 |
| | | | | | | | | | | |
| 24 · · · · | olat Billed | Total Para Ou | f of Pocket | | | | | | | |
| 21 1 | stal Paul by Inst | uram Total Dua | | | | | | | | |
| 5/ | | Totale | | | | | | | | |
| Eit Date P | rowder Raff | Dauchiption Tel | tal Ama-Insurance | Incurance Web | e Of Paid Out of | freck Nuc Amount C | Ne | | | |
| 6 | | 11111 | | | | | 1 | | | |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| ñ | | | | | | | | | | |
| | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 2 3 4 5 5 7 8 9 | | | | | | | | | | |
| | | | | | | | | | | |
| 8 | | | | | | | | | | |
| a l | | | | | | | | | | |
| 0 | | | | | | | | | | |
| 1 | - | | | | | | | | | |
| 1 | | | | | | | | | | |
| | 11 / Smet 2 /s | and a l | | | | a. | | | | |
| | | | | | | | _ | | | |
| Deaw+ - A | gloShapes • | 1001 | 12011 | · 2· A· | 1日日日日 | 6 | | | - | |

Figure 17-1: Enter headings for a medical expense tracking worksheet

| | Excel Ma Si View | | Fermat Tools Data Window Help | Type & manimum file time | |
|----------|---------------------|------------|--|--------------------------|--------|
| L III | 1.1.1.4 | 3171 | 1 4 1 5 . J | | |
| lotel | | | 7.2. 単単単用(3.5. ・ 1.2) (死伏) (- 0・ム・) | | |
| E7 | | & SUM | E9 E50) | | |
| A | B | L D- | DEFER | M N | 0 |
| 2005 Med | ical Bill Tra | cking | | | |
| | Tolal Bille | | Total Paid Out of Parket | | |
| | Total Pad | by Insurar | Total Due | | |
| 8 | | | Totale D D D D D D D | | |
| Eif Date | Provider | Raff | Description Total Amerinaurance Insurance Write Of Paid Out oCheck NurAmount DOM | | |
| c. | | | | | |
| 5 1 | | | | | |
| 2 | | | | | |
| | | | | | |
| 1 | | | | | |
| | | | | | |
| | | | | | |
| 1 | | | | | |
| 1 | | | | | |
| 1 | | | | | |
| - | | | | | |
| 1 | | | | | |
| 1 | | | | | |
| 7 | | | | | |
| 1 | | | | | |
| 2 | | | | | |
| 1 | | | | | |
| 1 | | | | | |
| | | | | | |
| | | | | | |
| 1 | | | | | |
| | wet1/Se | 412/500 | no/ | | (3) |
| taw - | AutoShup | 45 - 3. 3 | | | |
| -t- | 10000 1000 | 100.000 | | 14.8 | diam'r |

Figure 17-2: Use AutoFill to easily duplicate a formula

16

Calculate the Amount Due

 Create a formula in cell K9 that subtracts the total of the payments made from the total amount billed by typing =E9-SUM(F9:I9).



Notice in Step 1, the compound formula created with a standard reference and an Excel function.

- 2. Select cell K9.
- 3. Choose Edit Copy a marquee appears.
- **4.** Click and drag from cell K10 through the end of your calculation area. Use the same amount of rows as in Step 1 of the section "Create Totaling Formulas".
- **5.** Choose Edit⇔Paste. Excel copies the formula. Figure 17-3 shows a value of 0 in each pasted cell.

Specify Data Validation

- 1. In two adjacent cells, preferably in an unseen area, type Yes and No.
- **2.** Select cells C9 through C50, or whichever row you use as your last worksheet row.
- 3. Choose Data=>Validation.
- 4. From the Allow drop-down list, choose List.
- *5.* Click the spreadsheet icon in the Source box. The Data Validation dialog box temporarily collapses.
- **6.** Highlight cells Q1 and Q2, or whichever cells you used in Steps 1 and 2, and press Enter. The Data Validation dialog box reappears, as shown in Figure 17-4.
- **7.** Click OK. Notice when you click cell C9 or lower, a drop-down arrow appears with the Yes or No choices.

| Elle El | Si View | Insert Forma | Tools | Data | Window | Help | | | | | | | | typ Animili | inter test | |
|-----------------|----------------------------|--------------|-------|------------|------------|---------|--------|-----|-------|--------|------|-------------|--------|-------------|------------|-----|
| B.H. | A LI LI LI | A LEL SIL | 4.0- | 1.11 | | ξ. 2. + | (4:11) | 415 | 100% | - 16 2 | | | | | | |
| sel . | | + D 7 12 | | # <u>.</u> | \$16. K | 12.23 | 课课 | 1.0 | * - A | 1 | | | | | | |
| 13 | | E D | | E | | - | | 1 | | 3 | 100 | | M | N | | |
| | ical Bill Track | ing U | | 2 | + | G | н | - | - | 4. | - PC | L . | M | - | - | 0 |
| erer ora | | 14. | | | | | | | | | | | | | | |
| - | Total Biller | D Total | Paul' | D | | | | | | | | | | | | |
| | Total Paul | O Total | | 0 | | | | | | | | | | | | |
| - | | Totale | | D | n | u | | a | | D | | 0 | | | | |
| Bit Date | Provider R | | | | unince its | | | | | | | | | | | |
| | | | | | | | | | | | _ | 0 | | | | |
| - | | | | | | | | | | | | 0 | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | | | | | | | | | | | | 0 | | | | |
| 1 | | | | | | | | | | | | a. | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | | | | | | | | | | | | 0 | | | | |
| 1 | | | | | | | | | | | | 0 | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | | | | | | | | | | | | 0 | | | | |
| | | | | | | | | | | | | Ð. | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | | | | | | | | | | | | 0 0 | | | | |
| | | | | | | | | | | | | 0 | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | - | | | | | | | | | | | 0. | | | | |
| | | | | | | | | | | | | 0 | | | | |
| - | | | | | | | | | | | | 0 0 0 | | | | |
| | i. himi | 2/sneets/ | | | | | | | 163 | _ | | 0 | | | | - 6 |
| · · · · / · · · | wet) / speci AutoShapes | | | | | | | | 14 | 1 | _ | - | Part 1 | _ | _ | 1.5 |

Figure 17-3: Copy the Amount Due formula

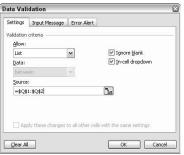


Figure 17-4: Setting a Yes or No validation answer for the Rx column

Format the Worksheet

- 1. Highlight worksheet cells you want to format.
- **2.** Apply any desired formatting such as applying currency or number formatting, widening columns, bolding headings, and applying borders. See Chapter 4. Figure 17-5 illustrates a formatting example.

Determine Print Settings

- 1. Choose File⇔Page Setup. Excel displays the Page Setup dialog box.
- **2.** On the Page tab, select Landscape, choose the Fit To option, and make it 1 page wide by 1 page tall.



Depending on the number of rows in your sheet, you may want to make the settings more than 1 page tall.

- 3. Click the Margins tab and enter .5 for each margin.
- 4. Click the Center on Page Horizontally option.
- *5.* Click the Header/Footer tab and click the Custom Footer button.
- *6.* In the Left section, type **Page &[Page] of &[Pages]**. Optionally, click the Page Number and Number of Pages buttons.
- 7. Click OK.

162

- On the Sheet tab (shown in Figure 17-6), click in the Print Area text box and type A1:K50 (or however many rows you anticipate using).
- 9. Click OK to close the Page Setup dialog box.

| Bitadi | Total Pa | oil by innu and a | 9716.60 691.00 | 2005 Telat Paul Out of Pocket Total Bue Telata Disconguism of Services | 315.40 19.60 Fritan Total Amazant Filled | 1 Tracker | | | | | 14 |
|--|----------|-------------------|-------------------|--|--|------------------|---|-------------|-------|---|-------------|
| 1044 Twatery tensor ware 105.00 104.00 105.00 104.00 | EHE Date | oil by innu and a | 895.00 | Total Due Totals Description of Services | EFTBLOB Total Arresont Billing | Robart Arice All | | 19.00 | FILE | _ | 14 |
| Bit Same Provide Box Boxangian at forces Bit ald Annust N Boxange (N) Period of all Same (N) Period (N) Descing (N) <th></th> <th></th> <th></th> <th>Description of Services</th> <th>Total Amount Billiod</th> <th>Robust Arice All</th> <th></th> <th>10.00</th> <th>FLEAR</th> <th>Y</th> <th>14</th> | | | | Description of Services | Total Amount Billiod | Robust Arice All | | 10.00 | FLEAR | Y | 14 |
| Difference Difference <thdifference< th=""> Difference Differen</thdifference<> | | | | Description of Services | Billed | | | | | | |
| B102000 D-James No Annual Physical H11020 H5030 102300 112300 1 | | | | Annual Physical | | | | Wester Care | | | |
| | | | _ | | 1110.00 | 175.00 | | PHILE CHI | | | |
| | | | | | | | | | | | |
| | | | | | - | | | | | | |
| | - | | | | | | | | | | 50 |
| | | - | | | | | | | | | 5 (W) |
| | | | | | - | | | | | - | |
| | | | | | | | | | | - | |
| | _ | | | | | | | | | | 800 |
| | | | | | 1 | | _ | | | | |
| | | | | | - | | | | | | |
| | | | | | - | | | | | | 840 |
| | | | | | | | | | | | - (RO) |
| | | _ | | | | | | - | | - | |
| | - | | | | - | | | | | - | |
| | | | | | | | | | | | |
| | | | - | | 1 | | | | | _ | |
| | | | - | | - | | | - | | | |
| 80 | | | | | 2 | | | | | | 80/ |
| | | | | | | | | | | _ | |
| | - | | | | - | | | | | | |
| | | | | | - | | | | | - | 807 |
| | | | | | | | | | | | \$0) 201 |
| | | | | | | | | | | | |
| | | | | | | | | | | _ | 80 |
| | - | | | | | | | | | | 107.0 |
| | - | | | | | | | | _ | - | |
| | - | | | | - | | | | | - | |
| | | | _ | | 2 | | | | | | 800 |
| | | | _ | | | _ | | | | | |
| | - | | | | | | | | | - | |
| | | | | | | | | | | | |
| | | | | | - | | _ | | | - | |
| | | | | | | | | | | | |

Figure 17-5: Apply formatting to your worksheet to make it easier to read

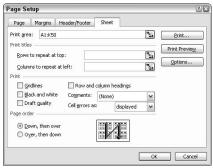


Figure 17-6: Specify the print area

16

Add Protection from Accidental Changes

- 1. Select cells A1 and A2. Choose Format Cells.
- **2.** From the Protection tab, remove the check mark from the Locked option. Click OK.
- **3.** Select cells A9 through J50 (the data entry area). Choose Format=>Cells.
- **4.** From the Protection tab, remove the check mark from the Locked option. Click OK.
- **5.** Choose Tools⇔Protection⇔Protect Sheet. The Protect Sheet dialog box, shown in Figure 17-7, opens.
- 6. Click OK.

Duplicate the Worksheet for Other Family Members

- 1. In cell A2, type the patient's name.
- **2.** Right-click the Sheet1 tab and choose Rename. The Sheet1 name is highlighted.
- **3.** Type the patient's name. Press Enter. Excel renames the worksheet.
- **4.** Right-click the newly renamed tab and choose Move or Copy.
- 5. Click the Create a Copy option. (See Figure 17-8.)
- 6. Click OK. Excel adds a copy of the sheet.
- **7.** Right-click the new worksheet tab and rename it to the second patient's name.
- **8.** In the second patient worksheet, click cell A2 and enter the second patient's name.

| Protect Sheet | |
|--|---------|
| Protect worksheet and contents of locks | d cells |
| Password to unprotect sheet: | |
| Ī | |
| | |
| Allow all users of this worksheet to: | |
| Select locked cells | ~ |
| Select unlocked cells | |
| Format cells | |
| Format columns | |
| | |
| Format rows | 1 |
| Format rows Insert columns | |
| Format rows Insert columns Insert rows | |
| Format rows Insert columns | |

Figure 17-7: Protect your worksheet from accidental changes

| Move or Copy | × |
|---|------|
| Move selected sheets To book: | |
| Medical Bill Tracking.xls | ~ |
| Before sheet: | |
| Mary Sheet2 Sheet3 (move to end) | ~ |
| Create a copy | ~ |
| OK Car | icel |

Figure 17-8: Duplicate the worksheet for each family member

Create a Totals Worksheet

- 1. Rename the tab of Sheet2 (or any blank worksheet in the workbook) to Totals.
- **2.** From one of the patient worksheets, copy cells A1 and A2 to cells A1 and A2 on the Totals worksheet.
- **3.** From one of the patient worksheets, copy cells E8 through I8 to cells E8 through I8 on the Totals worksheet.
- **4.** Widen the columns as needed to see the text.
- *5.* In cell A2, type the word **Totals**.
- 6. In cell C8, type the words Patient Name.
- 7. In cell D8, type the word Service. (See Figure 17-9.)
- 8. In cells C9 and C10, type the first patient's name.
- 9. In cell D9, type Rx.
- 10. In cell D10, type Other.
- 11. In cell D11, type Totals. (See Figure 17-10.)
- **12.** In cells E9 through I11, type the formulas in the following table, substituting Mary for the first patient worksheet tab name.

| In Cell | Туре | |
|---------|---------------------------------|--|
| E9 | =SUMIF(Mary!C:C,"Yes",Mary!E:E) | |
| E10 | =SUMIF(Mary!C:C,"No",Mary!E:E | |
| E11 | =SUM(E9:E10) | |
| F9 | =SUMIF(Mary!C:C,"Yes",Mary!F:F) | |

| lusel . | | | メオモー 風工 | | | | |
|---------|--------------|---------|------------------------|-----------------------------|-----------------------------|-----------|-------------|
| De B | • A Service | U | | | | н | T. |
| | | | | Medical Bill | Tracker | | |
| | | | and the second | Totals | | | |
| - | | | | | | | |
| | | | | | | | |
| 1- | | | | | | | |
| | | 423.0 | Total Amount Billed | Insurance #1 Amount Paid | Insurance #2 Amount Paid | Write Off | Paid Out of |
| £ | Patient Name | Service | Billed | Amount Paid | Amount Paid | Write Off | Pocket |
| 1 | | | | | | | |
| | | | | | | | |
| 1 | | | | | | | |
| 1 | | | | | | | |
| | | | | | | | |
| ł — | | | | | | | |
| - | | | | | | | |
| 1 | | | | | | | |
| | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| - | | | | | | | |
| 1 | | | | | | | |
| 1 | | | | | | | |
| I | | | | | | | |
| * | | | | | | | |
| | | | | | | | |

Figure 17-9: Entering headings on the Totals worksheet

| · A Total | | 田(木本大学) | 吉建康()。3 | · A ·] | | |
|----------------------------|---------|--------------|--------------|-----------------------------|-----------|----------|
| 1 2 | IJ | E | F | 5 | | T. |
| | | 2005 | Medical Bill | Tracker | | |
| | | | Totals | | | |
| | | | | | | |
| | | | | | | |
| | | Total Amount | Insurance #1 | Insurance #2 Amount Paid | | Paid Out |
| Patient Name Mary Smith | Service | Billed | Amount Paid | Amount Paid | Write Off | Pocket |
| Mary Smith | Tetals | 1 | | | | |
| | Lines. | 4 | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Figure 17-10: Preparing the Totals worksheet

| In Cell | Туре |
|---------|---------------------------------|
| F10 | =SUMIF(Mary!C:C,"No",Mary!F:F |
| F11 | =SUM(F9:F10) |
| G9 | =SUMIF(Mary!C:C,"Yes",Mary!G:G) |
| G10 | =SUMIF(Mary!C:C,"No",Mary!G:G |
| G11 | =SUM(G9:G10) |
| H9 | =SUMIF(Mary!C:C,"Yes",Mary!H:H) |
| H10 | =SUMIF(Mary!C:C,"No",Mary!H:H |
| H11 | =SUM(H9:H10) |
| 19 | =SUMIF(Mary!C:C,"Yes",Mary!I:1) |
| 110 | =SUMIF(Mary!C:C,"No",Mary!I:I |
| 111 | =SUM(19:110) |

- **13.** Repeat Steps 8 through 12 for each patient. Figure 17-11 illustrates data entered into the Mary worksheet and how the totals reflect in the Totals worksheet.
- 14. Click cell A1and choose Formats>Cells.
- *15.* From the Protection tab, remove the check mark from Locked.
- 16. Click OK.
- 17. Choose Tools > Protection > Protect Sheet.
- *18.* Click OK. The worksheet is now protected against accidental changes.

| dead | 100 | -10 2 0 | and the state of the local day | 1. <u>H</u> I. | - 11 51 100 | | | | | | |
|-------------------|---------------------------------|----------------|--------------------------------|--|-----------------------------|----------------------|---------------------|--------------------|-----------------|-------------|---------|
| Af | | TXI5 Medical | | | and the second second | | | | | | |
| a and | UR fracting! | | and an and a second | | | | | | | | |
| or it is likely a | A | | | a. | E. | | n | 켓 | Gen | - | 100 |
| - | | | | Total | a LY,412.51 Total Amount | BLAND.AL | | 2.54 11218 | Paid Did of | | EX. |
| 1 00 | Data Provide | T DAT. | Densestar | ion of Services | Billed | Arrosant Paul | Annual F | | Porset | Runnber | Date |
| 0.0 | CONE Dr. Ameri | 142 | Arrentinger | | \$110.01 | P50 | 3. | 20.00 | #1500 | | 50 |
| | COUL CV: | Yes | TROOD (SHITLAN | | 134 m 134 m | 129.0 | | | 35.00 | Name . | 30 |
| 11 1 | COSES, Vitemmis CB | No: 1 No | sharerogram | Construction of the second sec | \$101.01 | \$160.00 | | 15.00 | 30,00 | | 1.99 |
| 1 0 | 11005 Courty Hos | plar Jip Ha | The Vist | | 21/02/01 | 3024 | | 2.94 11138 | | | 412 |
| | ith Mary / tob / | | 1.1.1 | | 194.00 | 41,000 | | 310.0 | | | 1.42 |
| | BBC Darking J | The A strength | (C) | | | | | | | | |
| ardina. | A B | | | | | | 10 | | н. | 11 | - |
| | | | | | Tenne St | ANNE AND | \$1.444.20 | 1297.52 | \$157.50 | 0% | n - |
| 1.0 | 102.000 | | Sec. 1977 | 100 C | Total A | mount Inst | rance#1 | trease ance #2 | 214 | Paid Det of | 61 |
| 1481 | | | | cription of Service | | | unt Paid | Amount Paid | Write Off | Pockut | . 664 |
| | 2385 Dr. Johns. 7385 CVU | 1 | | | | \$110 00 \$264 00 | \$75.00 \$269.00 | \$20.00 | _ | \$150 | North L |
| | riskog Dr. Marsh | 6 1 N | | | | \$150.00 | 1125.00 | | 810.002 | \$151 | |
| 01 | 1605 Dr. Imis | h | i intected fo | é., | | \$45 (0) | \$20.00 | \$10.00 | | \$15 (| n – |
| | 1005 5V9 | 1 10 | | | | \$124(00) | 14700 | 500 mil | \$97.30 | \$150 | 91 |
| | Hary ABoby T | that / Smith | a meaning | and the second s | | 130 (11) | *(0.00 | 100.00 | | 1000 | das. |
| 111.01 | al Bill Tracking | a. | | | | | | | | | 123 |
| | | . ú. | Low Anna | Constant Property in | Course of second | i | | And a state of the | THE OWNER WATER | T N | 10 |
| | Potient Hame | Service | Intel Amount | Amount Paint | Instance #2 Aminant Paul | Wile Of | | d Out of ocket | | | |
| 2 | Mary Smith | an | 1 44.62 | 1 56.03 | 1 | 1 | 1 | 10.00 | | | |
| 8 | Mary Strith | Other | \$ 1,344.31 | 8 892.44 | F 102.04 | | | 15.00 | | | |
| | | Totals- | \$1,412.31 | 11,050,44 | 1182.94 | 512 | 3.837 | \$25.00 | | | |
| 0 | and the second | Au | E | 1 29120 | | 1 11 | 10.1 | 25.00 | | | |
| 6 | | | \$ 1.677.00 | | 3 297.52 | | 05.4 | ASID | | | |
| | Finds Tamilian Bolts Sauttry | 2024F | | | | | | | | | |
| 00 0 0 | | Tetais | \$2,015.00 | | \$297.52 | 115 | 7.54 | 576.00 | | | |

Figure 17-11: The Medical Bill Tracker worksheet with sample data



These formulas look at column C on the patient worksheet, and determine if the expense is a prescription. It then adds the values together.



If you need to unprotect the sheet to make changes, choose Tools=> Protection=>Unprotect Sheet.



Save and use the workbook as a template! See the next section to do so.



Save the Workbook as a Template

- 1. Delete any data in the patient worksheets.
- **2.** Choose File Save As. The Save As dialog box appears, as shown in Figure 17-12.
- 3. From the Save as Type drop-down list, choose Template.
- **4.** Click the Save button.

166

5. Close the template. You can now safely enter data into a blank Medical Bill Tracker without danger of modifying the original template and its formulas.

| Save As | | | | | | | U. |
|---|------------------------------------|---|------------|------------|---------------------|---------------------|-----------|
| Save yı: | Tempkote | η. | | * @ · | 101 | 33. | iooja + |
| Ny Decent Documents Veritop Ny Concuments Ny Concuments Ny Concuments Ny Concuments Ny Ny N | ALA FORM- 10 Income Rate- | Anartakkon schedule Mark (analy Uniger schedule) | Bi di alig | California | Ensister tracead | Lipenser report2 | Facto Dee |
| | File game: | Medical Bil Tra | | | | × | []ave |
| | Seve autyper | Terriste | | | | - | Carical |

Figure 17-12: Save the workbook as a template

Planning for Your Financial Future

Your life is taking shape right in front of you. You and your spouse want to buy a house, raise a family, and spend life happily ever after. Your personal future depends a lot on your financial future. Fortunately, Excel has several functions you can use to plan for the future you want.

First, to keep up your expectations, you need to determine how much house you can afford to buy. But before you can buy the dream house, you know you need to pay off some credit card debt. Next, from you own experience, you know that college is expensive, and the costs are bound to get much higher by the time the kids are ready. Finally will come your golden years. You dream of the house on the beach or traveling to exotic places.

How are you ever going to save enough for that? This chapter shows you how to

- Determine how much payments will run on that cute little ranch house down the street. Excel has a PMT function to help with that.
- Plan to pay off a credit card balance using the NPER function, which requires three key pieces of information: the interest rate, the current payment amount, and the credit card balance.
- Determine how much you need to save each month to reach a college fund or retirement goal. Again, utilize Excel's PMT function.



- → Prepare to Pay Off a

Plan for a House

- 1. In cell A1, type OUR DREAM HOUSE.
- **2.** In cells A3 through A8, type **House Price**, **Down Payment**, **Loan Amount**, **Interest Rate**, **Loan Term**, and **Monthly Payment**.
- 3. In cell B3, enter the house price.
- *4.* In cell B4, enter the down payment amount.
- **5.** In cell B5, enter the formula **=B3-B4**. This gives the amount you will finance.
- **6.** In cell B6, enter the interest rate. Format this amount as a percentage.
- **7.** In cell B7, enter the loan term. Usually for a house, this value is in years. See Figure 18-1.
- 8. In cell B8, enter a PMT function to calculate the monthly payment. The PMT function has three required arguments (=PMT(RATE, NETPER, PV) so you need to enter =PMT(B6/12,B7*12,B5). See Figure 18-2.
 - RATE is the annual interest rate. You entered the interest rate in cell B6. To get a monthly rate, you divide this argument by 12.
 - NETPER is the term of the loan that you entered in cell B7. Because this value is in years, and you want monthly payments, you multiply this argument by 12.
 - PV represents the present value that is the amount you will finance, not including interest. You calculated this amount in cell B5.



When you type the start of a function, Excel displays a yellow box containing a list of the arguments used by the function. Arguments in brackets are optional.

| g Wienweit Excel Teanalaitainere Bile Lên Yênw Inner Ferman Toolk Data Window Help Jacob La 19 Jacob L | | | | | | | | | |
|--|-------------------|-----|---|---|-----|-------|------|--|--|
| | NENHIS STR. | | | | | | | | |
| A | 8 | C | D | E | 1 F | G | н | | |
| 1 OUR DREAM HOUSE | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 House Price | -200000 | | | | | | | | |
| 4 Down Payment | 35000 | | | | | | | | |
| 5 Loan Amount | 165000 | | | | | | | | |
| 6 interest Rate | 6.25% | | | | | | | | |
| 7 Loan Term | 30 | | | | | | | | |
| 8 Monthly Payment | 2.24 | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 12 | | | | | | | | | |
| 22 | | | | | | | | | |
| 34 | | | | | | | | | |
| 26 | | | | | | | | | |
| 36 | | | | | | | | | |
| + + + \Sheet1/sheet2/sheet3/ | | 1 | | - | _ | | 1.20 | | |
| Draw - 🔄 AutoShupes - 🍾 🥆 🖂 🖯 | 3日412月日15・2・A・日日: | EAN | 1 | | | | | | |
| euro. | | | | | | iant. | | | |

Figure 18-1: Enter the values needed to calculate a home loan payment

| Eile Litt View Insert Format Tools | Data Window Help / −1 − = ₩. Σ − 01 ±1 \u | 125 1275 | and . | | | tin Ini | + - 0 > |
|------------------------------------|--|----------|-------|---|----|---------|---------|
| 414 + 10.00 | 用 4 年 日本 10 日本 | | | | | | |
| B8 • A =PMT(B6/12,B7*12,B5) | 8 | C. | D | E | (F | G | H |
| 1 OUR DREAM HOUSE | | | | | | | |
| 24 | | | | | | | |
| House Price | 200000 | | | | | | |
| Down Payment | 35000 | | | | | | |
| 5 Loan Amount | 165000 | | | | | | |
| 5 Interest Rate | 0.25% | | | | | | - |
| / Loan Term | 30 | | | | | | |
| Monthly Payment | [1,015.93] | | | | | | - |
| 12 A | | | | | | | - |
| u . | | | | | | | 1 |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 2 | | | | | | | - |
| 4 | | | | | | | - |
| 6 | | | | | | | - |
| | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 0 | | | | | | | |
| 1 | | | | | | | - |
| 1 | | | | | | | |
| 2 | | | | | | | - |
| 2 4 | | | | | | | |
| 5 | | | | | | | |
| 0 | | | | | | | |
| 6 • • •\Sheet1/Sheet2/Sheet2/ | 1. 1. C. M | 1 | | | | | 31 |
| Draw- 🔄 AutoShapes- 🔨 🖒 🖂 🖂 🛃 👍 🗄 | 2 (0 (3) (3+2+A+== | E 4 8 | | | | | |

Figure 18-2: Using the Excel PMT function

Prepare to Pay Off a Credit Card Balance

- 1. In cell D1, type PAY OFF CREDIT CARD.
- **2.** In cells D3, D4, and D5, type **Monthly percentage rate**, **Current payments**, **Credit card balance**, and **Months until paid off**, respectively.
- **3.** In cell E3, create a formula to enter the *monthly* percentage rate you are paying on a credit card. For example if you are paying a 21% annual interest, you enter =21%/12. Excel displays a value of .0175, which is the 21% annual rate divided by 12 months. (See Figure 18-3.)
- **4.** In cell E4, enter your current payment amount, preceded with a minus sign. Enter **-125** if you are making \$125 payments every month against the credit card balance.
- *5.* In cell E5, enter the remaining balance on the credit card. Like the payments, this must be entered as a negative value such as -3700.
- **6.** Create an NPER formula to calculate how many months you need to pay off the credit card. The formula should read **=NPER(E3,E4,E5)**. As you see in Figure 18-4, the resulting answer shows how many months it will take to pay off the credit card balance. The NPER function has three required arguments:
 - Interest rate is usually given annually, so you divide it by 12 to give a monthly rate.
 - Payment amount that you enter as a negative amount.
 - Present value is the amount of the loan, not including interest.
- 7. Apply any desired formatting to the cells.

| - | licenselt Excel - Rosenchal Anners Eile - Edit View Insert For | | | | | | ~~ | in ter | - 0 3 |
|----------|---|------------|---|-----|--------|---|----|--------|-------|
| 414 | | | (現 2 - 41 計) (11 回回) 12mg - ・ 12 点) (20 回 二・ 3- 五) | | | | | | |
| - | E3 - & +21%/12 A. | 6 C | 0 | 1 | EI | F | G | н | - |
| 1 | OUR DREAM HOUSE | | PAY OFF CREDIT CARD | 3 | | - | - | | |
| 2 | | | | | | | | | |
| 2 | House Price | 200000 | Monthly percentage rate | | 0.0175 | | | | |
| | Down Payment | 35000 | Current payments | - 2 | - 2 | | | | |
| | Loan Amount | 165000 | Credit cerd balance | | | | | | |
| | Interest Rate | 6.25% | Months until paid off | | | | | | |
| | Loan Term | 30 | | | | | | | |
| | Monthly Payment | (1,015.93) | | | | | | | |
| 9 | | | | | | | | | |
| 10. | | | | | | | | | |
| 1 | | | | | | | | | |
| 12 12 | | | | | | | | | |
| は、 | | | | | | | | | |
| 14 15 | | | | | | | | | |
| 6 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| IG. | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 17 | | | | | | | | | |
| 12 | | | | | | | | | |
| 14 | | | | | | | | | |
| 25 | | | | | | | | | |
| 16 | and the second second | (| | _ | | | | | |
| | w\sheet1(sheet2[sheet2] | | 14 | | | | | | .94 |
| Dea | W* - AutoShapes · · · · E | 102115(03) | ・2・2・4・年三日日日日 | | | | | | |
| early. | | | | | | | | 14.84 | |

Figure 18-3: Enter the annual interest rate divided by 12

| T Clark Con | View Insert Format Tools | J 41 - 16 | | 11 48 45 | | | | the a stream life | |
|-------------|--|-----------|---------|----------|------|--------|-----|-------------------|------|
| deset | * t0 + D / D = = = 1 | | | | | 42 | | | |
| ES | /k =NPER(E3,E4,E5) F3 | E | F | G | H | - | 8 | P. I | 1 |
| 4.1 | PAY OFF CREDIT CARD | - | | 0 | 11 | | -44 | 6 | 1 De |
| 2 | the set steen store | | | | | | | | |
| 3 | Monthly percentage rate | 0.0175 | | | | | | | |
| 4 | Current payments | ~100 | | | | | | | |
| 5 | Credit card balance | -7400 | | | | | | | |
| 6 | Months until peid off | -47 8846 | | | | | | | |
| 1 | The state of a point of the | | | | | | | | |
| 11 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10. | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 12 23 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 26 | | | | | | | | | |
| 76 | the man we | | | | 112 | | | | |
| | et1 (shout2 / shout3 / | | | | 14 | | | | 21 |
| Deaw- A | atoShapes · S · S · D C · E · 4 | 2133 | 2 . A . | 프 프 프 문 | 18.8 | | | | |

Figure 18-4: Using the Excel NPER function

Save for College or Retirement

- 1. In cell A12, type OUR SAVINGS GOALS.
- 2. In cell A14, type Savings Goal Amount.
- 3. In cell A15, type Interest Rate.
- 4. In cell A16, type Years to Goal.
- 5. In cell A17, type Current Savings.
- **6.** In cell A18, type **Monthly Amount to Save.** See Figure 18-5.
- 7. In cell B14, enter the savings goal amount.
- 8. In cell B15, enter the annual interest rate.
- *9.* In cell B16, enter the number of years you have until you will need the money for college or retirement.
- *10.* In cell B17, enter the amount you already have saved toward the goal.
- 11. In cell B18, create a PMT formula that includes the interest rate, term, and amount. You also need to add one of the optional arguments: the future value argument. This time, the PMT formula format is =PMT (interest rate, term, current value, future value) so you should enter =PMT(=PMT(B15/12, B16*12,B17,B14). The PMT function actually has two optional arguments:
 - Future Value is the balance of the loan after all payments have been made. You do not need to enter a future value unless the value at the end is not equal to zero.
 - Payment Type, one or zero, which indicates whether the payment occurs at the beginning of the month (1) or the end of the month (0).
- **12.** Format the cells as desired. Figure 18-6 displays an example.

| A18 · / Monthly Amount to Save | Current payments (100.00) Credit cent balance (7.400.00) Months unbi paid off (48) | θ |
|---|--|---|
| OUR DREAM HOUSE 1 House Price 200,000,001 2 Doen Payment 55,005,00 5 Loan Anount 155,005,00 6 Interns Fabe 0.20% 7 Loan Term 30 8 Monthly Payment (1,015 as) 9 10 10 10 12 OUR SAVINDS GOALS 13 13 Intern Fabe 5 14 Samps Goal Anount 5 15 Interns Rabe 10 17 OUR SAVINDS GOALS 15 18 Interns Rabe 10 19 Years to Goal 17 10 Years to Goal 17 | PAY OFF CREDIT CARD Monthly percentage rate 1.75% Current payments (10000) Creat card balance (7.40000) Months unb paid off (48) | Ĥ |
| 2 House Price 200,000,001 3 Down Payment 35,000,00 5 Lean Ancurit 163,000,00 6 Interest Fate 0.25% 7 Lean Term 30 8 Monthly Payment (1),015.95) 9 10 11 12 OUR SAVINGS GOALS 13 13 Sawings Goal Amount 15 16 transe Rote 16 17 Current Savings 17 | Multiful percentage rate 175% Current payments (100.00) Credit cent belance (7,400.00) Months until paid off (48) | |
| 4 Down Payment 55,000,00 5 Loan Amount 165,000,00 6 Interest False 0.25%, 7 Loan Term 50 8 Monthy Payment (1),015,953 9 U0 11 10 21 20UR SAVINQS GOALS 13 Sawings Goal Amount 15,112,112,112,112,112,112,112,112,112,1 | Current payments (100.00) Credit cent balance (7.400.00) Months unbi paid off (48) | |
| 4 Down Payment 55 (000 00 5 Loan Amount 165 (000 00 6 Interest Rate 0.20% 7 Loan Tarm 50 8 Monthy Payment (1).015 95) 9 U0 11 10 20 OUR SAVINGS GOALS 12 12 OUR SAVINGS GOALS 13 13 Savings Goal Amount 15 16 Interest Doal 17 17 Current Sovings 14 | Current payments (100.00) Credit cent balance (7.400.00) Months unbi paid off (48) | |
| S Lean Amount. 155,000.00 Interest Rate. 0.20%. 7 Lean Tarm 0.20%. 8 Monthly Payment. (1.015.95) 9 (1.015.95) 10 10 12 OUR SAVINGS GOALES 13 Savings Goal Amount. 16 Savings 16 Savings | Credit cerd balance (7,400.00) Months unbi paid off (48) | |
| | Months unbil paid off [48] | |
| 7 Loan Term 80. 8 Monthly Payment (1.015 bS) 9 (1.015 bS) 10. 10 10. 11. 12 OUR SAVINDS GOALS 13. 13 Savings Goal Amount 15. 16 Years to Coal 17. 17 Current Savings | | |
| Monthly Payment (1.015 93) G U0 U1 QOUR SAVINGS GOALS A Savings Goal Amount To Careat Savings Gal To Current Savings | | |
| 9 10 11 12 13 14 Sevings Goal Amount 16 Years to Goal 16 Years to Goal 17 Curriet Sevings | | |
| 11 21 OUR SAVINGS GOALS 12 14 Sawings Goal Amount 15 trainest Rate 16 Years to Goal 17 Current Savings | | |
| 11 21 OUR SAVINES GOALS 13 14 Savings Goal Amount 15 Interest Role 19 Years to Goal 19 Years to Goal 19 Current Savings | | |
| 13 14 Sawings Goal Amount 15 Informet Rate 16 Years to Goal 17 Current Sawings | | |
| 18 Savings Goal Amount 15 Interest Rate 16 Years to Goal 17 Current Savings | | |
| 15 Interest Rate 16 Years to Goal 17 Current Savings | | |
| 16 Years to Goal 17 Current Savings | | |
| 17 Current Savings | | |
| | | |
| 18 Monthly Amount to Save | | |
| | | |
| 10 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 24 | | |
| 25 | | |
| 26 • • • •\Sheet1 / sheet2 / sheet2 / | tat | |

Figure 18-5: Reach your savings goals by following the Excel function

| | | ····································· | 1 | | | | |
|--|--|---|---|---|---|---|------|
| | 815/12, B16*12, B17, B14) | | - | - | - | | - |
| 1 OUR DREAM | | PAY OFF CREDIT | E | Æ | G | н | 100 |
| OUR DREAM | HOUSE | PAY OFF CREDIT | CARD | | | | |
| 2 House Price 4 Down Payment 5 Loan Amount 6 interest Rate 7 Loan Term 8 Monthly Payment 9 | 200,000.00 35,000.00 169,000.00 0.25% 50 (1,015.93) | Monthly percentage rate Current payments Credit card balance Months unbil paid off | 1 75% (100 00) (7,400 00) (48) | | | | |
| 12 OUR SAVINGS | GOALS | | | | | | |
| 14 Savings Goal Amount 15 Interest Rate 16 Years to Goal | 60,000,00 .3% | | | | | | |
| 17. Current Savings 18 Monthly Amount to Save 19 20 | (209.83) | | | | | | |
| 21 22 23 | | | | | | | |
| 24 25 26 • • • • • \sheet1 (sheet2 / sheet Draw - • • AutoShapes - • • • | |). 2-2-4-=∈∎∎ | _ | | _ | | 1310 |

Figure 18-6: Format the worksheet so you can easily review the numbers

170

Integrating Excel into Word

No single computer program does everything. You probably use multiple applications for different tasks, such as playing Solitaire, surfing the Internet, reading e-mail, and of course, working with Excel. If you use Excel, you probably use Microsoft Word to handle creating memos, letters, and other such documents.

In this chapter, I show you how to integrate two major Microsoft Office applications: Word and Excel. You discover how you can create a worksheet in Excel and include it in the middle of a Word document.

If you begin by creating a table in Word, then conclude that you are better off working with Excel, you also see how you copy the Word table into any Excel worksheet. There's no need to completely start over.

Chapter Get ready to . . . → Copy Excel Cells into Word172 → Insert a Saved Excel Worksheet into Word173 → Embed an Excel Worksheet into Word174 ···→ Create a Word Mail Merge Form Letter Using an Excel List176

Copy Excel Cells into Word

- **1.** From the Excel worksheet, highlight the cells you want to copy into a Word document. Choose Edit Copy.
- **2.** Open a Word document. Make sure the blinking cursor is at the location where you want the cells.
- **3.** Choose Edit → Paste. Excel pastes the cells into a Word table. Figure 19-1 shows both the Excel worksheet and the new Word table.



The Word table includes any Excel formatting such as column width, font, color, and border style.

The Word table and the Excel worksheet are not linked together. Any changes made to one don't reflect on the other.

- **4.** Modify the Word table using any of the following:
 - **Replace a value:** Highlight any existing text in a cell and type the replacement text.
 - Delete a column or row: Click in a cell of the column or row you want to delete and choose Table Delete Columns or Table Delete Rows.
 - Insert rows or columns: Click in a table cell where you want the new row or column and choose Table There insert. Then select Columns to the Left, Columns to the Right, Rows Above, or Rows Below.
 - Widen a column: Position the mouse at the line to the right of any column and drag to the left or right.
 - **Delete the table from the Word document:** Select the row above the table, the table itself, and the row below the table and press the Delete key (see Figure 19-2).

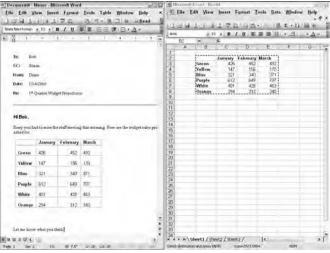


Figure 19-1: Copy Excel cells into a Word table

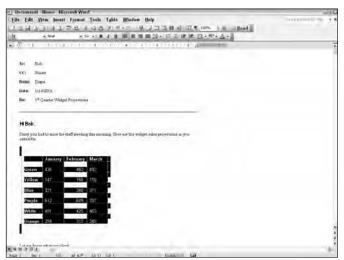


Figure 19-2: Remove the table from Word

Insert a Saved Excel Worksheet into Word

- 1. In a Word document, position the insertion point where you want the worksheet to appear.
- 2. Choose Insert=>Object. The Object dialog box opens.
- **3.** From the Create from File tab, click the Browse button. The Browse dialog box opens.
- **4.** Locate and double-click the Excel file you want to include in your Word document. The Object dialog box reappears (see Figure 19-3).
- 5. Click OK. The Excel workbook appears as a Word table.



Even if your worksheet contains multiple sheets, only the top sheet with all cells containing data appear. You cannot specify a particular range of cells. If you want an Excel chart, save the workbook with the chart on top before inserting into Word.

Edit the Inserted Worksheet

- 1. Click once on the Word table.
- 2. Perform one of the following actions:
 - Press Delete to delete the table.
 - Drag one of the handles to resize the table.
 - Double-click to edit the values. The Excel menu bar appears, along with column letters and row numbers. (See Figure 19-4.) The worksheet includes any formulas you created in Excel.
- 3. Click outside the table to deselect the table.

| EC: Diam | | |
|--|---|--|
| From: Dians | Object | |
| Date: 1/14/2000 | Quality free Codarition for | |
| Re: 1 rd Quarter Walget Projections | Pile game Pile and Settings/(roldpl) bicuments/waget presistants (M) Browsen | |
| Hi Bob. | 🖂 Lenji to Ale- 🗔 Doplajv se Gori | |
| Zenry you had to mine the staff meeting this asked for | - | |
| 1 | Tendt | |
| Let us finter what you that | tooument wo that you can set it later using the application which created the source file. | |
| HEADEN TRAK | Creal | |
| | | |
| | | |

Figure 19-3: Insert a worksheet as an object

| | n Tools Data Window Help | - 41 - 11 44 48 100 | |
|---|--|------------------------|--|
| | | | |
| A12 - A | | | |
| 61. 「「」」」」」」」」」: | | Logical Second | |
| | | | |
| te: Bob | | | |
| FC: Diam | | | |
| Ference Dispa | | | |
| Date: 1114/2006 | | | |
| | | | |
| Ret 18 Quarter Wirtget Projection | ana | | |
| | | | |
| | | | |
| Hi Bob. | | | |
| | ang this morning. Here are the widget ed | | |
| | | a Edolational av later | |
| deliant for | | | |
| A D C | P L Z | | |
| A B C 2 January Feliciary 3 Green 4.5 462 | Mutch TOTALS | | |
| A D C 7 January February 1 3 Green 426 462 4 Yallow 147 156 | Mutchi TOTALS 432 1,370 170. 473 | | |
| A D C 7 January February January February 3 Green 426 462 4 Yellow 117 156 5 Blas 321 340 | March TOTALS 492 1.370 170 471 371 1.032 | | |
| A B C 7 January Felicitary January Felicitary 3 Green 425 452 4 Yallaw 137 156 5 Bias 321 340 5 Pueple 512 549 | Much TOTALS 492 1,370 1771 473 371 1,032 767 1,560 | | |
| A D C 7 January Felicitaty January Felicitaty 3 Green 4.25 452 4 Yellaw 1.47 156 5 Blass 321 340 5 Purple 512 649 7 White 401 425 | Mutch TOTALS 492 1,370 1771 471 371 1,032 707 1,968 463 1,289 | | |
| 7 January February 3 Green 425 451 4 Vallaw 147 156 5 Blas 321 340 5 Pumple 512 56 6 Pumple 512 569 7 White 401 425 8 Orange 254 312 | Match TOTALS 852 1,370 170 471 371 0.032 707 1,964 663 1,289 341 945 | | |
| A B C 2 Jamary February 425 452 3 Green 425 452 4 Vallaw 147 156 5 Bias 327 350 5 Bias 327 350 6 Pumple B12 659 7 Whate 301 455 6 Orange 324 332 4 TOTALS 2.201 2.333 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 7 Jamary February 425 452 3 Green 425 452 4 Vallaw 147 156 5 Bias 327 350 5 Parple 612 649 7 White 01 425 8 Orange 524 332 9 TOTALS 2261 233 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 7 January Frehruny 425 452 4 Yellow 137 156 5 Basi 321 156 6 Purple 512 642 7 While 401 425 6 Dasi 321 340 6 Purple 512 642 7 While 401 425 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 2 January Frehnung Green 425 442 3 Green 425 442 155 45 4 Vellaw 102 155 5 5 5 6 5 6 5 6 5 7 30 5 7 5 6 5 7 30 5 7 30 5 7 30 5 7 30 5 7 30 30 32 3 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 7 January Feltmary 3 Gireen 4.25 4 Vallaw 1.37 5 Bias 327 340 5 Purple 512 549 7 White 401 425 8 0rawaye 244 312 9 TOTALS 2.261 2.33 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 2 January Frehruary Green 425 442 3 Green 425 442 155 45 4 Vellaw 102 155 5 5 5 6 5 6 5 6 5 7 30 5 7 5 6 5 7 30 5 7 30 5 7 30 5 7 30 5 7 30 30 32 3 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |
| A B C 2 January Frehruary Green 425 442 3 Green 425 442 155 45 4 Vellaw 102 155 5 5 5 6 5 6 5 6 5 7 30 5 7 5 6 5 7 30 5 7 30 5 7 30 5 7 30 5 7 30 30 32 3 | March T0TALS 4992 1.370 1770 471 371 1.032 707 1.984 463 1.289 340 945 2.543 7.077 w | | |

Figure 19-4: Edit cells, formulas, or formatting

Embed an Excel Worksheet into Word

- **1.** Follow Steps 1 through 4 of the "Insert an Existing Worksheet into Word" section.
- **2.** Click the Link to File option in the Object dialog box, shown in Figure 19-5. Click OK. The Excel workbook appears as a Word table. The Word table is linked to the original Excel worksheet.



If you click Display as Icon, instead of displaying the workbook as a table, Word inserts an Excel icon into the document. Double-clicking the icon opens the workbook in Excel. However, the Excel program must be installed on the PC trying to open the workbook.



To resize the Word table, click once on the table, which displays the eight sizing handles, and drag any handle until the table reaches the size you want.



To delete the table, click once on the table and press the Delete key.

- **3.** Make changes in the Excel workbook and the Word document using any of the following methods:
 - With the Word document open, right-click the Word table and choose Update Link.
 - Double-click the Word table, which launches the Excel program and opens the linked workbook (see Figure 19-6). Make any changes in Excel; the Word table automatically updates.
 - When you reopen the Word document, a dialog box prompts you to update the Word document from the original Excel file. Click Yes.



Figure 19-5: Insert an Embedded worksheet into a Word document

| ······································ | F: E = 使使用 □ · ······························· |
|--|---|
| NC 1 | |
| Memorandum | |
| | S Hieroven Excel widges projections als |
| Mc Bob | DElle Luir View Josert Fyrmat Tools Date Window Help |
| OC: Zantes | LUNSING OF CHARLENDE |
| Note: Dane | Ang + 10 + 10 Z = 10 + 21 + 2 + A + |
| Date: 1/14/2006 | |
| Rec 1 th Queeter Widget Presenting | 1 |
| | 2 January February March TOTALS 3 Green 1,425 1,512 1,548 4,585 |
| | A Yellow 147 156 170 473 5 Blue 321 340 271 1.032 |
| HiBob. | 5 Parpla 812 549 707 1,963 |
| Sorry you had to must the stuffmenting the norming. Here are the weigh | 7 54 401 425 463 1,289 0 6 0 6 0 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| saked for | cites 8 Orange 294 312 340 945 |
| January February March TOTALS | 9 TOTALS 3,201 3,293 3,658 10,292 |
| Green 1,426 1.512 1.649 4,585 Yellow 147 156 170 473 | 11 |
| Blue 321 340 371 1.032 | 3 |
| Pueple 517 549 707 1.968 401 475 455 1.289 | 12 • • • • • • • • • • • • • • • • • • • |
| fittanga 234 312 340 945 | Ready HAD |
| TOTALS 3,201 3,383 3,698 10,292 | |
| Laters and and more more | |

Figure 19-6: Changes in the original Excel workbook appear in the Word table



Copy a Word Table to Excel

- 1. In Microsoft Word, create a table (choose Table ↓ Insert Table).
- 2. Enter any desired data in the Word table.



Press Tab to move from cell to cell, or click the mouse in any individual cell.

- **3.** Drag across the table to highlight the cells you want to copy, as shown in Figure 19-7.
- **4.** Choose Edit⇔Copy or press Ctrl+C.



To move, instead of copy, the Word table to Excel, choose $\mathsf{Edit}{\leftarrow}$ Cut or press $\mathsf{Ctrl}{+}\mathsf{X}.$

- *5.* Open or create the Excel workbook in which you want to place the Word table.
- *6.* Click the cell in which you want the table to begin.
- Choose Edit=>Paste or press Ctrl+V. The Excel worksheet displays the Word table. As shown in Figure 19-8, each cell in the Word table occupies one cell in the Excel worksheet.



If the Word table cells have a border around them, the Excel cells also have a border around them.

The Word table and the Excel worksheet are not linked together. Any changes made to one don't reflect on the other.

8. Format the cells as desired. See Chapter 4.

| an 2096 disc. Microsoft 1 | | | aith |
|-----------------------------|------------------------|--|---------------|
| File Edit View Javant | Faimat Tools Tak | Window Help | Toracement of |
| LOGING MILLION | 2313379 | A AND THE REPORT OF A PARTY AND A PARTY AN | - Real |
| 14 Nerval + Talta + Talance | - 11 - 18 Z | 山原南部部に三使後間をやる | 4-8 |
| 1 | (1-k | 1 - 1 + | and a method |
| | | | |
| EEDERAL W/H - MARI | RIED . | | |
| TAX NAME: ET OS | | | |
| STATUS: Maned | | | |
| CHECK: I'llio check your | k in the report menute | ā- | |
| GOVERNMENT: Packet | 1 | | |
| FORMULA ASWED - | PRODUCTE (TABLE (AV | LIAL (ADJUSTED GROSS) | |
| (EMP_) FEDERAL ALLOW | AVEES * 3200()) - 84P | EDERAL EXTRA | |
| | | | |
| Table amounts: | | | |
| GROSS MORE | WITHOUD | PERCENT | |
| 8,000.00 | 0.00 | 10 | |
| 22,900.00 | 1,490.00 | 15 | |
| 68,040.00 | 8,265.00 | 10 | |
| 126,900.00 | 22,976.00 | 40 | |
| 195,450.00 | 42,670.00 | 33 | |
| 341,950.00 | 91/042.00 | 2 | |
| FEDERAL W/H-SING | 1.E | | |
| TAX ID: PITS | 1.11 | | |
| TAX NAME: FIT 05 | | | |
| STATUS: Single | | | |
| CHECK: (hi) check mit | | 01 | |
| GOVERNMENT: Federal | | | |
| | | LIAL (ADJUSTED_GROSS) | |
| (EMP_FEDEPAL_ALLOW | ANCES = HI(X))) - BYP | FULEPAL_EXTRA | |
| Table amounts: | | | |
| GROSSMORE | WITHOLD | PERCENT | |
| 2,650.00 | 0,00 | 10 | |
| 10,000,00 | .735.00 | 15 | |
| 32 240:00 | 4.071.00 | 3 | |
| | ALC: NOT ON A | FORMUTA AVE- | |

Figure 19-7: Highlight the table cells you want to take to Excel

| 0 B | and the second second second second | Cartan C. Par J Charles B. B. T. | and the second se | 44.48.10 | a sall | | | a processing for the | 1 | |
|-----|-------------------------------------|----------------------------------|---|----------|--------|---|---|----------------------|---|---|
| den | S. 11 .8 (B. J. | | | | | | | | | |
| - 2 | - A - 1 | 8 | c [| 17 | E | F | 8 | н | | |
| 1 | GROSS MORE | WITHOLD | PERCENT | u | F | | 8 | | - | |
| 1 | 8.000.00 | 0 | 10 | | | | | | | |
| 1 | 22,900.00 | 1.490.00 | 15 | | | | | | | |
| 1 | 68,040.00 | 8,261.00 | 25 | | | | | | | |
| 3 | 126,900.00 | 22,976,00 | 28 | | | | | | | |
| Ċ. | 195,450.00 | 42,170.00 | 33 | | | | | | | |
| | 343.550.00 | 91.043.00 | 35 | | | | | | | |
| 01 | | | 2 | | | | | | | |
| 6 | | | | | | | | | | |
| | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| ŧ. | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 07 | | | | | | | | | | |
| | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 0 | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| ŝ | | | | | | | | | | |
| 6 | and an externa for the | 1- | | | 1127 | | | | | |
| 2 | W\Sheet1 (Sheet2 (Sheet3 | 1 | | | 14 | | | 144 | | 2 |

Figure 19-8: Copy a table from Word to Excel

Create a Word Mail Merge Form Letter Using an Excel List

1. Create and save an Excel worksheet with the data you want to merge in an Excel list. The Excel worksheet does not need to be open.



Although not a requirement, the data will be easier for you to identify later if it has column headings.

- 2. In Word, choose Tools^t>Letters and Mailings^t>Mail Merge. The Mail Merge task pane appears on the right side (see Figure 19-9).
- 3. Select the Letters option.
- 4. Click Next: Starting Document.
- **5.** Choose whether to create the mail merge from the current Word document or an existing Word document.
- 6. Click Next: Select Recipients.
- 7. Select the Use an Existing List option.
- 8. Click Browse. The Select Data Source dialog box appears.
- *9.* Double-click the Excel file containing your list. The Select Table dialog box opens, as shown in Figure 19-10.
- 10. Select the range name, sheet name, or area containing data.



If the first row of your list does not contain headers, remove the check from the First Row of Data Contains Colomn Headers option.

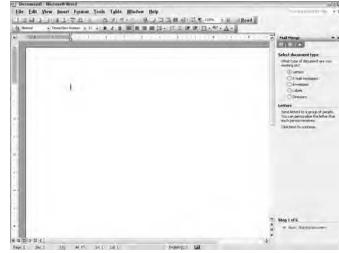


Figure 19-9: Select a mail merge document type

| Neve | Description | Notified. | Gealed. | Type |
|-------------------|-------------|-----------------------|-----------------------|-------|
| Customer List PC | | 1/14/2006 15:12:14 FM | 1/14/2006 11:12:14 PM | TARLE |
| Customer Last Bit | | 1/14/2006 11112114 PM | 1/14/2006 11:12:14 PM | TABLE |
| ELECTRONICE. | | 1/14/2006 11:12:14 PM | 1/14/2006 11:12:14 FM | TABLE |
| 41 | | | | |

Figure 19-10: Select the data area you want to merge

- **11.** Click OK. A Mail Merge Recipients list like the one in Figure 19-11 appears, containing your data.
- **12.** Remove the check mark next to any record you don't want to include. Click OK.



Optionally, click Clear All to clear all the check marks or click Select All to check all the records.

- 13. Click Next: Write Your Letter.
- *14.* Type the form letter document, leaving blanks where you want the variable (such as name, address, phone number, or product) information to appear.
- **15.** Click the insertion point at the first location where you want the variable information (such as the recipient name and address location).
- *16.* From the task pane, select the desired option:
 - Address Block: Select an address layout.
 - **Greeting Line**: Insert a greeting of your choice, along with the recipient's first name (if you have such a field in your database), and then a comma or colon.
 - Electronic Postage: Prints electronic postage on your envelopes (if you subscribe to an electronic postage service).
 - **Postal Bar Code**: Prompts you for the zip code field from your Excel list and inserts a bar code matching the zip code field.
 - More Items: Displays the Insert Merge Field dialog box (see Figure 19-12), which displays each field listed in your Excel list. Click the field you want to insert into Word, and click the Insert button.



Figure 19-11: Deselect any unwanted record

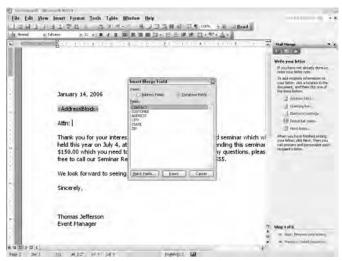


Figure 19-12: Select the fields you want included in the mail merge

177

17. Click Next: Preview Your Letters. As shown in Figure 19-13, the document you created appears with the first data record from your Excel list.



Click through the Forward and Back buttons to browse through each recipient in your list. If you find a recipient you don't want to include, click the Exclude This Recipient button.

18. Click Next: Complete the Merge. You can now print your form letters.



178

To edit a specific letter, click Edit Individual Letters. To make a change to the master document, click the Previous button until you get to Step 4, and then make any desired changes. Click the Next button until the merge is completed.

Make Mailing Labels

- 1. Follow Steps 1 and 2 from the previous section.
- 2. Select the Labels option and click Next: Starting Document.
- **3.** Click Label Options. The Label Options dialog box, shown in Figure 19-14, appears.
- **4.** Choose the label size and click OK. You see a blank document with label gridlines.
- **5.** Click Next: Select Recipients. Follow Steps 7 through 12 of the previous section.
- **6.** Click Next: Arrange Your Labels. On the first label, either insert the Address Block or individual fields.
- **7.** Click the Update All Labels button. The fields you inserted appear on each label.
- **8.** Click Next: Preview Your Labels. Each record appears on its own label.
- 9. Click Next: Complete the Merge. Print your labels.



Figure 19-13: Preview the merged Excel list in the Word document file

| Label Options | | | | | 4 |
|---|---------------|---|--|----------|---|
| Dentes externation Det matrix Det matrix Deternand all p | a Day. | Torlandt Isoge (A | utomatically Se | | |
| Label efformation | | | | | |
| Label groducts: | Avery standar | d | | v | |
| Product number: | | a strange start | | | |
| 5097 - Dekatte 5159 - Address 5160 - Address 5161 - Address 5162 - Address 5162 - Address 5163 - Shipping | 4 | Type: | Address 1" Toda" Lotter (A.9) | 9 1) (m) | |

Figure 19-14: The Label Options dialog box

Blending Excel and PowerPoint

One of the most common ways to make others aware of your work is by giving a presentation. The Microsoft Office product, PowerPoint, is one of the most effective presentation products available in today's market. And because PowerPoint is part of the Microsoft Office suite, it's very easy to integrate information from other Office applications — in this example, Excel — into a PowerPoint presentation.

My mother always told me to do things right the first time. If you already spent the time and energy to create information in Excel, why should you have to re-create it in your PowerPoint presentation? You don't.

That's what this chapter is about. You find out how to take the powerful worksheet data or creative chart that you created in Excel and copy it to a PowerPoint slide. You can simply copy it once from Excel to PowerPoint, or you can create a link so that if the data in Excel changes, your PowerPoint presentation automatically reflects the changes. That's doing it right the first time.

Chapter 20

Get ready to . . .

| Copy Excel Cells into a PowerPoint Slide |) |
|--|---|
| → Drag an Excel Chart into a PowerPoint Slide181 | 1 |
| Hisert a Saved Excel Worksheet or Chart into a PowerPoint Slide | 2 |
| → Link an Excel Worksheet into a PowerPoint Slide | 3 |

Copy Excel Cells into a PowerPoint Slide

- From the Excel worksheet, highlight the cells you want to copy (see Figure 20-1). Choose Editt⇒Copy. A marquee appears around the highlighted cells.
- **2.** Open a PowerPoint presentation. Make sure you display the slide on which you want to paste the cells.
- **3.** Choose Edit >Paste or press Ctrl+V. Excel pastes the cells into a PowerPoint table including any formatting.



180

The PowerPoint table and the Excel worksheet are not linked together. Any changes made to one don't reflect on the other.

- 4. Modify the PowerPoint table using any of the following:
 - **Replace a value:** Highlight any existing text in a cell and type the replacement text.
 - **Delete a row:** Click in the row you want to delete, right-click, and choose Delete Rows.
 - **Delete a column:** Highlight the column you want to delete, right-click, and choose Delete Columns.
 - Change a column width: Position the mouse at the invisible boundary line (as shown in Figure 20-2) to the right of any column and drag to the left or right.
 - **Delete the table from the slide**: Click once to select the table object (the table object boundary has striped edges) and click again on the table object boundary and press the Delete key.

| 11 Eb | | | ools Data Windo | w Halp 10. z - 01 il 100- | 41 1970 E | -1 | | ~10 | ity Bol | 0 |
|---------|-------------------|---------------|--|------------------------------|-----------|----|----|------|---------|------|
| Tahcine | | | | - 14 (4) (00 (00) (b) | · · · · · | 1 | | | | |
| At | | Purchase B | E | D I | E | 6 | G | H | Y I | J. |
| 10.00 | Purchase | Discount | Rewards | Total Savings | - | | .0 | -11- | | 0. |
| 2 4 | 100.00 | \$ 10.00 | 5 - | \$ 10.00 | | | | | | |
| 3 4 | 1/0.00 | \$ 12.00 | 5 - | 1 1400 | | | | | | |
| 4 5 | 1.10.00 | 5 14.00 | \$ - | 3 1100 | | | | | | |
| 5 4 | 130.00 | \$ 15.00 | \$ 10.00 | 1 200 | | | | | | |
| 6 3 | 160.00 | \$ 16.00 | \$ 10,00 | 5 27.101 | | | | | | |
| 7 5 | 180.00 | \$ 18.00 | 5 10.00 | \$ 295.00 | | | | | | |
| 1.53 | 100.00 | \$ 20.00 | 5 10.00 | I RLOU | | | | | | |
| 9 5 | 101.00 | \$ 25.00 | \$ 10.00 | 3 1500 | | | | | | |
| tū. | 300.00 | \$ 30.00 | \$ 20.00 | 1 50.00 | | | | | | |
| 11 3 | 150.00 | \$ 35,00 | \$ 20,00 | \$ 55.00 | | | | | | |
| 12 \$ | 100.00 | \$ 40,00 | \$ 20.00 | 1 0000 | | | | | | |
| 12 5 | -150.00 | \$ 45.00 | \$ 30.00 | 1 /5.00 | | | | | | |
| 14 5 | 100.00 | \$ 50.00 | \$ 30.00 | 5 H0.00 | | | | | | |
| 15 | | | | | | | | | | |
| to. | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 21 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 23 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 25 | | | | | | | | | | |
| 26 | | | | | | | | | | |
| 27 | Carlotta calcurat | | and a start of the | | | | | | | |
| | H Ourt1 / Rees | m Pocket Tool | Commissions./ | | 14 | | | _ | - | 14.5 |

Figure 20-1: Use your favorite Copy command to duplicate cells

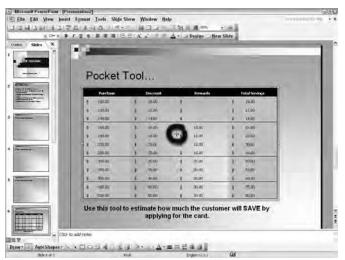


Figure 20-2: Make sure the cursor looks like this in order to resize the column widths

Drag an Excel Chart into a PowerPoint Slide

- 1. Open both the PowerPoint presentation you want to use and the Excel workbook that contains the chart. Make sure to display the PowerPoint slide you want.
- **2.** Resize and arrange the PowerPoint and Excel windows so that both are visible at the same time. Use either of the following methods:
 - Right-click a blank area of the Windows taskbar and choose Tile Windows Vertically or Tile Windows Horizontally.
 - Click the Restore button in each window so they are no longer maximized. Drag the window borders to resize them and drag the title bars to move them until both windows are in the desired size and location.
- 3. Select the Excel chart you want to copy.
- **4.** Hold Ctrl and drag the chart from the Excel window until it is in the PowerPoint slide. As you drag the mouse, the pointer looks like a small box as in Figure 20-3.



If you want to *move* the chart from Excel to PowerPoint, instead of copying it, don't press Ctrl. Dragging an object without Ctrl moves the object.

- *5.* Release the mouse button. The Excel chart appears on the PowerPoint slide, as shown in Figure 20-4.
- **6.** Maximize the PowerPoint window to restore it to full screen. You can then resize or edit the chart as desired.

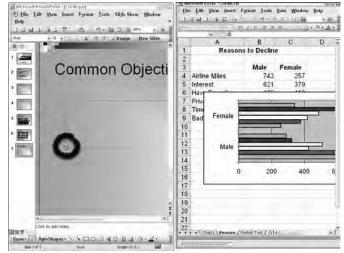


Figure 20-3: Use the drag-and-drop method to copy data from Excel to PowerPoint

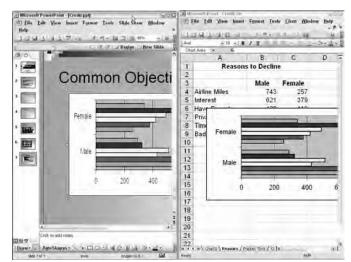


Figure 20-4: An Excel chart in both Excel and PowerPoint

Insert a Saved Excel Worksheet or Chart into a PowerPoint Slide

1. In PowerPoint, display the slide you want the worksheet or chart to appear on.



If you want to copy a chart, make sure to save the workbook with the chart as the top sheet. If your workbook contains multiple worksheets, only the top sheet appears in the PowerPoint slide.

- 2. Choose Insert Object. The Insert Object dialog box opens (see Figure 20-5).
- **3.** Click the Create from File option.
- 4. Click the Browse button. The Browse dialog box opens.
- **5.** Double-click the Excel file you want to include. The Object dialog box reappears and the path and filename appear in the File text box.
- **6.** Click OK. The Excel workbook or chart appears on the current PowerPoint slide, as shown in Figure 20-6.
- Modify the PowerPoint table or chart with any of the following methods (or check out the earlier section "Copy Excel Cells into a PowerPoint Slide" for additional ways):



Any changes are saved in PowerPoint only, not in the original Excel workbook.

- Click once on the PowerPoint object. Drag a handle to resize the object.
- Double-click the table or chart to edit the actual values. The Excel menu bar appears, along with column letters and row numbers.



Figure 20-5: Inserting data from a previously saved Excel workbook

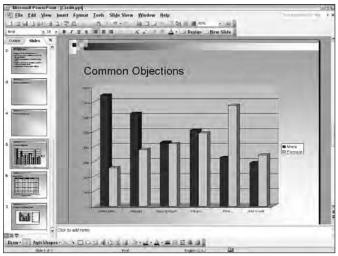


Figure 20-6: An Excel chart inserted into a PowerPoint slide



Link an Excel Worksheet into a PowerPoint Slide

- **1.** Open the desired Excel file. When creating a link, the originating Excel file must be a previously saved file.
- **2.** Select the portion of the file you want to duplicate in PowerPoint.
- 3. Choose Edit Copy or press Ctrl+C.
- **4.** Display the PowerPoint slide on which you want to create the link and choose Edit → Paste Special, which displays the Paste Special dialog box (see Figure 20-7).
- **5.** Choose the Paste Link option. With this option selected, any changes you make to the original workbook reflect in the PowerPoint slide each time you open the PowerPoint presentation.



If you click Display as Icon, PowerPoint inserts an Excel icon onto the slide. Double-clicking the icon opens the workbook in Excel. The PC opening the workbook must have Excel installed.

- 6. Click OK. The linked object appears on the slide.
- **7.** Refresh Excel data in PowerPoint by one of these methods:
 - With the PowerPoint presentation open, right-click the PowerPoint table and choose Update Link (see Figure 20-8).
 - Double-click the PowerPoint table, which opens the linked workbook in Excel. Changes in Excel automatically update in the PowerPoint table.
 - When you reopen the PowerPoint presentation, a dialog box prompts you to update PowerPoint from the original Excel file. Click Yes.



Figure 20-7: The PowerPoint Paste Special dialog box

| Sides X | e | | | | _ | | |
|---------|----------|-----------------------|----------|-----|------------------------------------|------------|--|
| | Fort | he Sales / | Associat | e., | | | |
| | | | | | | | |
| | - | Sales | Rate | | Comr | nission | |
| | \$ | 1,000 | 3.0% | | \$ | 30 | |
| | \$ | 2.000 | 3.5% | | \$ | 70 | |
| | \$ | 3,000 | 4.0% | | \$ | 120 | |
| 1000 | | 4.000 | 4.5% | 0 | CON | 10 | |
| | \$ \$ | and the second second | | 13 | Dopy Easter | 100 | |
| | . 4 | 5,000 | 6.0% | Ĩ | Save as Picture |)0 | |
| tools . | | | | | Linked Workshei | f Object # | |
| | | | | - | Hedate Link Show Picture To | illiar | |
| | | | | 18 | Grouping | | |
| 101.00 | | | | 13 | Digitat | | |
| | | | | 님 | Contem Animatie Action Settings | 6 | |

Figure 20-8: Updating the PowerPoint slide object



Using Excel with Access

You can share data between Access and Excel in many ways. You can copy data from an open worksheet and paste it into an Access datasheet, import a worksheet into an Access database, or simply load an Access datasheet into Excel using the Analyze It with Excel command.

This chapter shows you how to exchange data between Access and Excel through one of several processes:

- Importing, which creates a copy of an Excel spreadsheet in Access format.
- Linking, which connects an Access table to an Excel worksheet. You can view and edit the data in both the original program and in the Access file. Linking is useful when you need to share Excel data between Excel and Access users.
- Exporting, which lets you analyze your Access data in Excel format.

This chapter assumes you already know general database terms, such as records, fields, tables, queries, and primary keys. I also assume you know the basics of creating and using an Access database.

Chapter 21

Get ready to . . .

| | 186 |
|--|-----|
| → Import Data from Excel to an Access Table | 187 |
| → Link an Excel Worksheet to an Access Database | 190 |
| → Analyze Access Data with Microsoft Excel | 191 |
| ➡ Export Access Data to Excel | 192 |

Copy Data from Excel to an Access Table

- 1. If you don't already have an Access database created, from Access, choose File⇔New. If you already have an Access database, open the database and skip Steps 2 and 3.
- **2.** From the task pane, click Blank Database. The File New Database window appears.
- **3.** Enter a name and location for the new database and click Create.
- **4.** Switch to the Excel worksheet that contains the data you want to copy.



You cannot save an Excel worksheet as an Access database and you cannot create a link to Access from within Excel.

- **5.** Highlight the cells you want to copy to Access. Be sure to include headings if you have them, as shown in Figure 21-1.
- 6. Choose Edit≓>Copy.
- 7. Switch to the Access database.
- 8. Choose Edit≓>Paste.
- *9.* Click Yes if you included column headings in Step 5. A completion message box appears.



If you included headings, Access uses those headings as field names in the table.

10. Click OK. Access creates a new table in the database (see Figure 21-2).

| LI II. | | | | 44 43 1000 | | |
|---------------|------------|---------------------------------|------------------------|--------------------------------|-------------------------------------|---------|
| 1.58 | | 10.67.99.09 | 1 | 1001010418 | | |
| A | A B A | 1 6 | D | E | F | 22 |
| Month | Castomer E | | Contact Name | Contact Title | Address | Q.0000 |
| a slamary | HUNGQ | Hongry Owi All-Night Grocers | Patricia McKansa | Sales Associate | # Johnsteen Road | (Care) |
| Jamiary. | CACTU | Caldur Cerretan para Revar | Patacin Siripatri | Saws Agent | Canto 353 | Elitent |
| A January | WHET | Mina et Moode Chevelier | Paul Harridt | Accounting Managers | 59 rue de l'Antraye | Rem |
| 5 January | WELLI | Weisington Importations | Paula Parento - | Sales Manager | Rua do Morcado, 12 | Hosen |
| 5 January | HATTE | Battlesnake Conyon Geneery | Eaula Wilson | Assistant Sales Representative | 2017 Mittan Dr | Altua |
| 7. Aarsuary | NMCO | Comércia Minsien | Pedro Almin | Sales Amosiale | Air thes Lusladas, 73 | Séa P |
| # Jamaary | FRANC | Frankermersarit | Peter Franken | Maketing Missager | Elevitries Frintz 43 | Month |
| H Lanuary | KOENE | Körighan Estian | Philip Crattite | Sales Associate | Marchalutz 60 | Brand |
| fff Jarruary | WARTH | Wartian Harbiss | Petko Koskitato | Accounting Manager | Torkets 12 | Orte |
| IT Jammary | LEHME | Lahmanne Michtotunt | Hamore Mexicer | Salve Representative | Magazierren 2 | / cank |
| 12 Jarmary | OLDWO | Old Warld Delicatestern | Res Philips | Sales Representative | 7743 Bining St | Anote |
| 1. January | WARENC | Dis Wardsonta Kutr | Fits Multer | Sales Representative | Adentautance 900 | Stight |
| 14 Tableasty | ERNEH | Event Hardel | Finish Mendel | Salas Manager | Kartinganas 6 | Graz |
| 15. Fabruary | FANCH | Rancho grande | Sauge General | Sales Representative | Av. del Libon agot 903 | EMPER |
| TE / storuary | NORTS | North/Seath | Smon Crowther | Savet Associate | South House 300 Quarrotandpe | Londe |
| 17 February | DRACE | Dreiharbitt Deliksteuson | Swin Otheb | Order Administrator | Wate onweg 21 | Aichi |
| 19 February | AROUT | Around the Hern | Thurnan Hardy | Salay Representative | 120 Hampini Sta | Linet |
| 19 February | BSPEV | (B's Beveragts | Victoria Astroiom | Sales Representative | Fairting Circus | Linde |
| III February | CHOPE | Chop-suby Chinese | Varia Waria | Owner: | Hauntetr 29 | Sim. |
| 21 Fatinary | HUNGE | Hunary Cayets Import Shire | Vovha Laternet | Sales Representative | Eity Center Plaza 518 Man St. | Etain |
| 22 Pebruary | LAUCE | Laushing Encolling Wine Celling | Yoshi Tannaman | Marketing Antistat/ | 1900 Oak St. | Vanci |
| E Febluary | OCEAN | Gokano Atlaitien Lida | /Vvirine Muncalla | Sales Apert | ing Guittee Moncada 8585 Priss 20-A | Elivent |
| 4 Pabruary | WOLZA | Wolsky Linezd | Zbyrzok Pastrzenewsz | Owner | al Fatrona 60 | Warr |
| 25 Tebnary | ROMEY | Ramera y Minilia | Aleiandra Camino | Arguinting Manager | Gran Via. 1 | Main |
| m Fabrickry | MORGA | Magenstern Gesaminati | Alexander Feuer | Markoting Austisland | Heeritr 22 | Lupiz |
| If Tabruary | TRACH | Tradição Hipemientados | Anabela Domingues | Salar Fepresettative | Av. men de Castin, 414 | - 34e F |
| H Fabruary | GOURL | Groutmet Landoneten | André Ennanca | Sales Associate | Av. Brassi, 442 | Camp |
| Fabriary | EASTC | Earlien Convertiers | Ann Deven | Sales Ageth | 55 Minig Dielege | Linde |
| A Pabritary | LANCAL | La mason d'Asia | Armetta Etadói | Sales Manager | 1 nev Alsace-Lonaire | Teulo |
| H February | ANTON | Antoine Manare Taquanta | Artonia Marriel | Owner | Matadams 2312 | Adatt |
| | FAMA. | If amilia Arguittatio | Ana Char | Mattering Assistant | Rus Ordin, SD | USan F |
| L. March | SPUR | Split Rad Breek & Alle | Art Elephonic Investor | Sales Manager | P.O. Box 965 | Lands |
| Tá Manh | OFFICE . | Crue Dalinta . | Ramonio Babilia | Atomatical Management | Don on Dunifi- plant, \$77 | Dia 4 |

Figure 21-1: Select the cells you want to copy

| Business Cur | tomers : Database (Access 2000 file format) | | | |
|--------------|---|--|--|--|
| | sign allow X + 2 mm | | | |
| Objects | Create table in Design View | | | |
| 1004 | Create table by using wittend | | | |
| D Querles | Graate table by entering data | | | |
| Potes | (III (201)) | | | |
| W Reports | | | | |
| Dages | | | | |
| Theres | | | | |
| a Padies. | | | | |
| Quinter | | | | |
| Bavores | | | | |

Figure 21-2: An Access table named after the Excel worksheet tab

Import Data from Excel to an Access Table

- 1. Prepare your Excel worksheet data before importing:
 - If you don't want to import the entire worksheet, in the Excel workbook, create a named range containing the cells that you want to import. (See Chapter 2.)
 - Make sure the cells are in tabular format. If the worksheet contains merged cells, then the contents of the cell are placed in the field that corresponds to the leftmost column, and the other fields are left blank.
 - If the Excel spreadsheet has a cell containing more than 255 characters, and the cell is in a row farther than row 25, move the row up in the Excel list so it's within the first 25 records. Otherwise, Access truncates the data to 255 characters.
- 2. If you don't already have an Access database created, from Access, choose File⇔New. If you already have an Access database, open the database and skip Steps 3 and 4.
- **3.** From the task pane, click Blank Database. The File New Database window appears (see Figure 21-3).
- **4.** Enter a name and location for the new database and click Create.
- **5.** Choose File⇔Get External Data⇔Import. The Import dialog box appears.
- **6.** Select Microsoft Excel from the Files of Type drop-down list, as shown in Figure 21-4.
- 7. Select the Excel file from which you want to import data.



Importing a worksheet into Access creates a duplicate copy of the data and does not make any changes to the source Excel file.



Figure 21-3: Create a new database for importing Excel data

| Const that by and parted Const that | | Danie halfe ei Design bie | | | | |
|---|---|---|--|--|--|--|
| Control International Control Internatinternational Control International Control International Control I | <00/ects | | | - | | |
| Impension Internet State Internet St | | | Capital States | | DI | |
| Honse H | and the second second | Look p: | Dood Dood | - 0-310 | X = 2 . 200 + | |
| Hy Computer Dial log BIDC Access Stansary New Customers Bit | Tages Li Marris Hit Modes 199409 | Distances Destances Toutogo Hy Discounds | 2 of Baser Append 2 000 https: 3 000 https: 4 AA FQSH 4 AA FQS | Corress a Car Sala Chartenia Control Composition Com | Construction Shi Construction Shi Destruction Shi | |
| K S S S S S S S S S S S S S S S S S S S | | | April Dame: | cel. | M lepart | |
| | | | | | | |

Figure 21-4: Select Microsoft Excel as the file type you want to import

- **8.** Click the Import button. The Import Spreadsheet Wizard appears (see Figure 21-5).
- *9.* Select whether to import the entire spreadsheet or a range. If the spreadsheet has no named ranges and only one worksheet, you do not see this screen. Click Next.
- **10.** Specify whether the first row of your worksheet contains column headings. If it does, Access creates field names from the first row. If it doesn't, you can assign field names in Step 12. Click Next.
- **11.** Specify whether you want the data in an existing table or a new table. If you want the data in an existing table, you need to select the table name. Click Next.



If you select an existing table, Access appends the data to the table. Make the sure the number of columns in the worksheet or named range matches the number of fields in the table. The name, date type, and position of each column must also match those of the corresponding field in the Access table.

 Assign field names to each column by clicking each column and typing a name in the Field Name text box. (See Figure 21-6.)



If a column name violates the field naming rules in Access, Access assigns a valid name to the field.

13. Choose Yes or No if you want the field indexed. Click Next.



Optionally, click on a column you don't want to include and click the Do Not Import Field (Skip) option. You can skip columns during the import, but you can't skip rows.



Figure 21-5: Choose the area you want to import



Figure 21-6: Assign field names for the Access table

- **14.** Select an option for the primary index key. You can either let Access create one for you, select your own primary key or not have a primary key at all. Click Next.
- *15.* Enter a name for the Access table.
- **16.** Click Finish. Access imports the data and displays a message box like the one in Figure 21-7.



If any errors incur during the import, Access creates an error log table in the database and displays the name of the table in the message. It's a good idea to open the error log table and review the errors.

17. Click OK. Access creates the table (see Figure 21-8).



To import multiple worksheets or named ranges, repeat the import process for each worksheet or range.

- *18.* Review the imported data. Keep the following items in mind:
 - **Graphical elements**: Access does not import graphical elements, such as logos, charts, and pictures.
 - Data type: Access determines the data type based on the first 25 rows of data. If any values beyond the 25th row are not compatible with the chosen data type, Access ignores those values and does not import them.



You cannot change the data type of the destination field during the import operation, but you can change data types from the Access table design.

- **Calculated values:** Access imports only the results of a calculated cell, not the formula itself. If you need the formulas to update, you need to link the Excel worksheet to Access.
- **Hyperlinks:** Access imports cells containing hyperlinks as text fields.

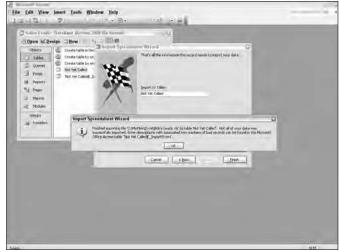


Figure 21-7: The import status message

| and the second second second second | Batahana (Arrena 2001/012 ta) selipi ⊐Hew > | Second statements | | Contact | Eir to Add Eir to Add | Bill to City | ED to Sal | Elli 10 Zep |
|---|--|-----------------------|--|------------|-----------------------|--------------|-----------|-------------|
| | | | Gantry Cabinate Da | | | Anderson | 157 | 4501 |
| Objects | Deale table of Design view | | 2 Indiana HBRA - Lis | sa Huddle | 4500 (Dan # | Anderson | - By | 4601 |
| I day | · Genie table by using woord | | 3 Santrol of Ander Ly | ini Payne | 120 West I | Anderson | 174 | 4801 |
| 2.000 | Treme take by manning date | 1 | 4 Hoot Services a Ke | all/Sham | 1083 Hope | Airt | 192 | 461 |
| | I Indine Called | | 5 Wintlün Advict Je | nniller. | 7905 U S | Asim | PA. | 4616 |
| - I Freek | That yet Called Jacothims | | E Indiana Outdoor St | teve Darg- | P D Box E | Grownshing | 82 | 461 |
| 18 Secoto- | | | T Utermaal C & A Oa | | | Brownshurg | 19 | 4611 |
| Al Pape | | | 3 Anchitecturili MI Ge | | | Calmal, | BV. | 4611 |
| and the second se | | | B.J.L. Thomas In Je | | | Camel | 3N | 4603 |
| i Photos | | 10 | 10 LbCarb (ISA, L) To | | | Catriel | 174 | |
| ult Weblers | 100.00 | | 11 Régrand Warkett La | | | Carroll | 192 | 460 |
| | | - | 12 Radon Contest 9 Ju | | | Carnel | EM. | 480 |
| | | | 15 Riz Charles Lie | | | Carroli | IN | 493 |
| ap Peoples | | - | 14 Timik & Piping C 20 | | | Camel | 19 | 4808 |
| | | 12 | 15 Layna Tracking Ja | | | Ovenille | BV. | 4613 |
| | | - | 16 Component Ser Do | | | Eleoca | -IN | 460 |
| _ | | | 17 Farland Ferice El | | | Faitlant | 171 | 4513 |
| | | - | 18 Automatic Post M | Ichaal Shi | | Foliers | W. | ARTS |
| | | - | 19 Butler Service | | 122 Shado | Fishers | IM | 4603 |
| | | | 20 DairyCham Liate Da | | | Fohere | 10 | 4603 |
| | - | 21 Indianapolis Wo Cy | | | Fishers | W. | 4703 | |
| | | | 22 Marza Orthodui Ela | | | Fot Warte | IN IN | 450 |
| | | | 23 Air Managaman Bo 24 Cantral Tool Jin | | 462 E Mv | Fortvilla | 04 | 460 |
| | | - | 25 T H Inc. Enteror 57 | | | Entrille | iN | 4904 |
| | | | 25 Redmon Supply To | | | Fortxilla | IN IN | 4604 |
| | | | 27 Specialized Ser Be | | | | in | 4504 |
| | | | 28 Fightaictown Fi Ja | | P.O. Box 1 | Rountanitown | 10 | 463 |
| | | | 29 Https//m.Concret.Lo | | | Fourtaintown | IN | 461 |
| | | Petertt [16] - | | | (12)ON B | - CAPILINITI | 14 | -401. |
| | | A server (14) - | 1. | •] # 225 | | | | |

Figure 21-8: Review the data for import inaccuracies

Link an Excel Worksheet to an Access Database

- **1.** Begin by applying Steps 1 through 4 of the previous section.
- 2. Choose File Open. The Open dialog box appears.
- 3. From the Files of Type list box, select Microsoft Excel.
- **4.** Locate and select the Excel worksheet you want to link to Access (see Figure 21-9).
- **5.** Click the Open button. Access creates a blank database named with the Excel filename, and automatically starts the Link Spreadsheet Wizard.
- **6.** Select which worksheet or named range you want to link. If the spreadsheet has no named ranges and only a single worksheet, you do not see this screen.



You can import only one worksheet or named range at a time. To link multiple worksheets or named ranges, repeat the link operation.

- 7. Click Next.
- **8.** Specify whether the first row of your worksheet contains column headings (see Figure 21-10). If there are headings, Access creates field names from the first row. If not, Access assumes the first row is a record.
- **9.** Click Next. Enter a name for the table.
- 10. Click Create.
- 11. Click Finish. A completion message box appears.
- 12. Click OK.



Figure 21-9: Determine the Excel file you want Access to link

| THE Shiew | distreet Wizard | | - |
|----------------|--|---|-----|
| | san use your column can column headings | needings in field ranges for syste table. Does the fe | 12 |
| First Root Gan | Leins Critere Heading | 9 | |
| | | | |
| | | | |
| Runch | Cuscomet ID | Company Name | a |
| 1 January | | Bungey Owl All-Night Geocece | |
| TannarA | CACTO | Cartus Comidas para llevar | 민니 |
| a January | VINET | Vins et alcosis Chevalier | |
| 4 January | WELLI | Wellington Importadora | 7 |
| 5 January | | Rattleshake Canyon Grocery | 8 |
| 6 January | CORNI | Commercia Rinstro | 1-1 |
| <1./1 | | | 1 |
| partagent. | | | - |
| | | | 1 |
| | | | |

Figure 21-10: Indicate if the first row contains column headings

- **13.** Double-click the Access table that appears as an Excel icon with an arrow next to it (as shown in Figure 21-11). Keep the following in mind when reviewing the data in Access:
 - Graphics, such as logos, charts or pictures, stored in the Excel worksheet, are not visible in Access.
 - You cannot change the field data type or size.
 - The source cells that contain formulas display only as results in Access, but you cannot modify the values in Access.
 - Access stores Excel cells longer than 255 characters in a memo field that displays only the first 255 characters.



If you delete the table from Access, you're deleting only the link, not the actual Excel worksheet.

Analyze Access Data with Microsoft Excel

- 1. Open the Access database you want to analyze.
- 2. Select the datasheet, form, or report you want to analyze.
- **3.** Choose Tools⇒Office Links⇒Analyze It with Microsoft Excel. The datasheet opens in Microsoft Excel as an Excel worksheet. Figure 21-12 shows both the Access form and the Excel worksheet.



Access saves the datasheet as an Excel file in the same location as the Access file. If a file already exists with that name, Access prompts you to overwrite the existing file. If you choose not to, then Access prompts you for a filename and location.



The worksheet is not linked to Access. Any changes made to the Excel worksheet do not appear in the Access datasheet.



Figure 21-11: An Excel linked icon in an Access database

| Microsoft Access 2020 Bin Edit Yang Manut Farmat Bereide Teols Window Holp Crief Unit a 2 ≈ a control U U in control b Statement | Ble Edit View | 4.011 - | x - 11 (1 1a m | - 8 |
|--|-------------------|--------------|------------------------------|---------------|
| Est flow Establish Date Name Matters | | Last Name | and the second second second | |
| DETERMINATION OF A DESCRIPTION OF A DESC | A | 0 | C | 1 |
| City Stem 220 REPARLEY SPENIGS WAY 19411 | 1 Last Name | provember DN | Harre | 20 |
| Plore | 2 BARKER | 04/12/1985 | HAURICE & JOAN BARKER | R #1 BOK |
| 1 301 871 8327 Sant Paus Date | A PEASONER | 05/15/1000 | TOM PEASONER | SIT WILLD |
| 1 520 ga 4/30 | 4 HODLIN | usinth and | GEMILD & LAUPENNI HEDEN | SMT LING |
| Here Constant woodooding to woodooding to yoogo | 5 MIBS | 09/22/4398 | CARL & VIRGINIA MOSS | おんRUA MY ヤ |
| Hered (16) + | 6 18001 | -2511/1103 | JOHNA SVOVA KRAFT | 3152 0405 |
| | 7 LADAMS | 10/15/100 | CALONINE VERMIC | DR DR |
| | S UAGINEERGER | 13/30/1986 | PAY & SUNA LUXENBERGER | 9841 645-0 |
| | B. UNITH | തത്തെ | OMER EVELOA SMITH | 4216.V006 |
| | TO INMADE! | anonas | GEORGE & ANNE ORANDAT | estr atea |
| | 11 BARTLEY | 01/07/1395 | MARY BARTLEY | EQ7 COOLE |
| | 12 DOUGLAS | 11/12/1985 | BVROW MMICHELE DIBUBLAS | 9822 FIE 51 |
| | TS HANNEY | pecced | THREE FACIOR HIMMARY | 325.111 |
| | 14 AMHONS | 12/05/1988 | EDITHAMMONS | 1015 414 |
| | Uiaw: AutoShapes: | mond | a | |
| an the state | Danks | a carteria a | light - | - |

Figure 21-12: Review the Access data in an independent Excel workbook



Export Access Data to Excel

1. Open the Access database and select the database object that you want to export. (See Figure 21-13.) The following table illustrates what Access exports, depending on the object and the view you have open when performing the export.



You can export only an Access table, query, form, or report. You cannot export data Access pages, macros, or modules.

| Object | View | What Exports |
|------------------------------|---|---|
| Tables, Queries, or Forms | Database window | Everything unless you pre-select an area before exporting. |
| Form | Form view | All fields and records even if the fields aren't included in the view. |
| Report | Database window, Print Preview, or Layout Preview | All data Group Header and Detail text boxes, and any text box in a Group Footer that has a Sum function. Access uses Excel's Outline feature. |

- **2.** Choose File=>Export. The Export To dialog box shown in Figure 21-14 appears.
- 3. In the Save as Type box, choose Microsoft Excel 97-2003.
- **4.** From the Save In box, select a location in which to save the file, as shown in Figure 21-15.
- **5.** In the File Name box, enter a name for the file. By default, Access suggests the Access object name.



Figure 21-13: Select the Access object you want to export

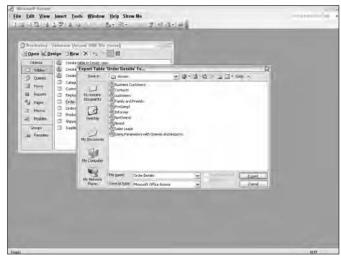


Figure 21-14: The Export To dialog box

- *6.* Optionally, if you are exporting a table or a query, click the Save Formatted check box, which tells Access to also export the field formatting. If the filename you selected in Step 5 already exists, one of the following occurs:
 - If you don't select the option, and the filename you choose already exists, Access doesn't overwrite the file; it adds a new worksheet to the file with the same name as the object that is being exported.
 - If you select the option and export a table, the Excel worksheet takes on formatting similar to the Access table, but overwrites the existing worksheet contents.
 - If you select the option and if you export an Access form or report, Access overwrites the Excel workbook by removing the original worksheets, and creating a new worksheet with the same name as the exported object.
- **7.** Click the Export button or, if you want to export only a pre-selected datasheet portion, click Save Selection. Additionally, the following actions occur during the export:
 - Graphic items such as images do not export.
 - Only calculation results export, not the calculation itself.
 - Check boxes on forms do not export.
 - Subreports export, but subforms do not.
 - Date values earlier than Jan 1, 1900, do not export and are replaced with a Null value.
- **8.** Open the Excel worksheet and validate the export feature. (See Figure 21-16.) For example, if a value was Null in Access, during the export, the values might be replaced with the data that should be in the adjacent column in the resulting worksheet.



Figure 21-15: Select a location for the exported Excel file

| 1 | 10000 | View Insert Format Tools | | | 41 41 4 | 1113 100 | 5.86 | | | | | |
|---------------|-----------|----------------------------------|------------|---------|----------|----------|------|---|---|-------|-----|-----|
| Ang | At | - 10 - B / U B 1 | 田主生 | 1.12.23 | ** | | 4-1 | | | | | |
| - | A | A Order ID B | 0 | D. | | | G | H | 1 | 1 | - 1 | - |
| 1 13 | Dellar ID | Prediact | Unit Price | | Discourt | - | - | | - | - | | |
| 2 | 10248 | Queso Cabrales | \$14.00 | 12 | 0.00% | | | | | | | |
| Ξ÷. | 10246 1 | Singaporean Hokkern Fried Mee | \$9 80 | 10 | 0.00% | | | | | | | |
| m (4 | | Mozzarella di Giovarni | \$34.80 | 5 | O CEPSE | | | | | | | |
| 5 | 10049 1 | Telu | \$13.60 | 9 | 0.00% | | | | | | | |
| | 10249 6 | Manimup Driet Apples | \$42.40 | 10 | 0.00% | | | | | | | |
| 5 | | Jack's New Erisland Clam Chowdar | \$7.70 | 10 | 0.00% | | | | | | | |
| 6 | 10250 1 | Minimus Divist Apples | \$42.40 | 36 | 10.00% | | | | | | | |
| 9 | 10250 1 | coulstana Fiery Hot Pepper Sauce | \$15.00 | 15: | 15 (EPE- | | | | | | | |
| to . | | Cotte's Knarketzed | \$16.80 | 6 | 5.00% | | | | | | | |
| 11 | 10251 8 | Ravial Angelo | \$15.60 | 15 | 500% | | | | | | | |
| 2 | 10251 1 | Loomana Fiery Hot Papper Saved | \$16.80 | 30 | 0.00% | | | | | | | |
| 3 | | Sir Rodney's Mamulade | \$64 (11) | 40 | 5 00% | | | | | | | |
| 14 | 10052 | | \$2.00 | 25 | 5 (IT)%. | | | | | | | |
| 151 | 10252 (| Camorribert Prerrot | \$27.20 | 43 | 0.00% | | | | | | | |
| 宿. | 10253.0 | Corpenzole Teline | \$10.001 | 20 | 0.00% | | | | | | | |
| | | Chamesure were | \$14.40 | 42 | 0.00% | | | | | | | |
| 7823122345873 | | Marilens | 116.00 | 40 | O CEP's | | | | | | | |
| 9 | 10054 6 | Boatanà Fantaisea. | \$3.60 | 15 | 15.00% | | | | | | | |
| 10 | 10054 8 | Pate chepis | \$19.30 | 21 | 15.00% | | | | | | | |
| 21. | 10054 0 | Longilla Taty | \$9.00 | 211 | 8.00% | | | | | | | |
| 12 | 10255 (| Charry | \$15.30 | 29 | 0.00% | | | | | | | |
| 23 | 10256.7 | Pavlora | \$13.90 | 36 | 0.00% | | | | | | | |
| 14 | 10256 1 | nlagt Sill | \$15.20 | 3 | 0.00% | | | | | | | |
| 5 | | Racielle Counterveul | \$44.00 | 30 | 0.00% | | | | | | | |
| 6 | 10256-6 | Padh Paster | \$26.20 | 15 | 0.00% | | | | | | | |
| 17 | 10256 (| Driginal Frankfuster grune Solla | \$10.40 | 12 | 0.00% | | | | | | | |
| 10 | | Schopp Schorawat | \$35.40 | 25 | 0.00% | | | | | | | |
| 29 | 10257 (| Chartreuse voite | \$14.40 | 5 | 0.00% | | | | | | | |
| 10 | 10257 (| Onginal Frankfutter grime Solle | \$10.40 | 15 | 0.00% | | | | | | | |
| H | 10258 (| Chang | \$15.20 | E0. | 20.00% | | | | | | | |
| ÷. | 10/258 | Chaf Anthre Furnite Mir | \$17.00 | 661 | 20.01% | | | | | | | |
| | + / Ord | er Details 4. | | - | | | - | | _ | | | 3.0 |

Figure 21-16: Export some or all of the Access data to Excel





• Symbols and Numerics •

& (ampersand), joining text items using, 148 ' (apostrophe), ignored during sort, 78 * (asterisk) as multiplication operator, 21 not allowed in worksheet names, 55 \ (backslash), not allowed in worksheet names, 55 \$ (dollar sign) for absolute references, 62 specifying repeating rows and columns, 104 = (equal sign) for references, 61, 62 - (hyphen), ignored during sort, 78 / (slash) as division operator, 21 not allowed in worksheet names, 55 3-dimensional effects AutoShapes, 50 charts, 94

• A •

absolute formulas, 26 absolute references, 62 Access analyzing data with Excel, 191 copying data from Excel to, 186

exporting data to Excel, 192-193 importing data from Excel to, 187-189 linking a worksheet to a database, 190-191 Advanced Filter feature, 124-125 aligning data in cells, 15, 34 ampersand (&), joining text items using, 148 analyzing Access data with Excel, 191 annotating, text boxes for, 48 apostrophe ('), ignored during sort, 78 arranging windows, 70 arrows in worksheets, 47, 52 asterisk (*) as multiplication operator, 21 not allowed in worksheet names, 55 auditing formulas, 30 AutoCorrect feature, 149, 150 AutoFill feature copying formulas with, 25 for custom lists, 79 extending a data series with, 19 AutoFilter feature customizing, 119, 122 finding multiple criteria, 123 overview, 119 secondary filter selection, 120 Top 10 option, 119, 121

AutoFormats feature, 40, 132 AutoOutline feature, 114 AutoShapes feature, 49, 50, 52 AutoSum button, 24 average value, calculating, 24 axes of charts displaying or hiding, 90 formatting the Value axis, 95 labels for, 91 X or Category axis, defined, 86 Y or Value axis, defined, 87

• B •

background color for cells, 44 backslash (\), not allowed in worksheet names, 55 bold type in this book, 1 borders around cells, 45

• C •

cascading windows, 70 case macro names and, 140 passwords and, 59 searching for data and, 81 cell references. *See* references cells. *See also* data entry; formatting adding borders, 45 aligning contents, 15, 34 background color for, 44 changing the active cell, 14 clearing formats, 46

conditional formatting for, 46 copying data to Access table, 186 copying formatting, 40 copying into PowerPoint slides, 180 copying into Word, 172 deleting data, 16 editing data, 16 finding, based on format, 82 hyperlinks for, 63 importing data to Access table, 187-189 indenting data, 35 inserting comments, 72 inserting hyperlinks, 63 merging data in, 148 merging to create a title, 35 naming a range, 18 relocking, 58 selecting multiple cells, 17 unlocking, 58 wrapping text in, 36 charts adding data series, 95 adding data tables, 90, 93 adding graphics, 87, 92 adding titles and labels, 91 basic, creating, 86 changing location of, 93 changing type for, 90 Chart Wizard for, 88-90 customizing the legend, 91 deleting, 86-87 deleting data series, 95 dragging into PowerPoint slides, 181

Index

elements of, 86-87 formatting the Value axis, 95 inserting into PowerPoint slides, 182 modifying attributes, 92 organization, creating, 96 overview, 85 PivotCharts, 138 printing, 105 subtypes, 89 3-dimensional effects, 94 types available, 88-89 circular reference error, 29 clearing. See also deleting or removing conditional formatting, 48 print area, 101 selections, 17 clip art, inserting, 51 closing Excel or Excel workbooks, 6 collapsing subtotal headings, 111 college savings worksheet, 170 colors for arrows, 47 for AutoShape shadows, 49 background for cells, 44 for fonts, 44 for gridlines, 104 for worksheet tabs, changing, 56 columns in worksheets adjusting width, 38 freezing and unfreezing titles, 69 grouping and ungrouping, 115 hiding and unhiding, 57 merging data in, 148

printing headings, 104 repeating, 104 R1C1 style for, 74 splitting data into multiple columns, 147 comments, 72, 74 Commission Calculator worksheet calculating commissions, 156-157 counting sales, 156 creating the commission table, 154 creating totals, 157 entering headings, 154 formatting, 158 overview, 153 protecting, 158 sales data input area, 155 totaling sales, 155 comparing spreadsheets, 71 compound formulas, 23 conditional formatting, 46 conventions in this book, 1 converting merged cells into plain text, 148 copying. See also inserting absolute formulas, 26 cells into PowerPoint slides, 180 cells into Word, 172 charts into PowerPoint slides, 181 data, pasting and, 18 data to Access table, 186 formatting, 40 formulas with AutoFill, 25 subtotals, 113 values using Paste Special, 26 Word tables to Excel, 175 worksheets, 55

COUNTIF function, 156 credit card payments worksheet, 169 cropping images, 52 customizing AutoFilter feature, 119, 122 chart legend, 91 header or footer for printing, 103 lists, 79, 80 toolbars, 146 viewing options, 74

• /) •

data entry alignment in cells and, 15 AutoFill for data series, 19 copying and pasting, 18 creating a data entry screen, 118 deleting cell data, 16 editing cell data, 16 primary types of data, 13 undoing, 16 validating data, 20 data series in charts adding a series, 95 adding graphics, 92 deleting, 95 overview, 87 data tables for charts, 90, 93 data validation locating cells with, 19 in Medical Bill Tracker worksheet, 161 using, 20

databases. See also Access; filtering data creating a data entry screen for, 118 defined, 109 dates entering in cells, 15 formatting, 37 sorting by, 80 validating, 20 decimals alignment of data and, 15 formatting, 34 deleting or removing. See also hiding arrows, 48 AutoCorrect entries, 149 AutoOutline, 114 AutoShapes, 49 cell data, 16 cell formats, 46 charts, 86-87 clearing conditional formatting, 48 clearing print area, 101 clearing selections, 17 comments, 72 custom lists, 79 data series in charts, 95 existing Excel file, 8 graphics, 52 hyperlinks, 63 macros, 144 PivotCharts, 138 PivotTable fields, 131, 137 PowerPoint slide elements, 180 separate PivotTables, 133



subtotals, 113 text boxes, 48 ungrouping items, 115 Word table columns or rows, 172 Word tables, 172, 173, 174 worksheets, 54 worksheets embedded into Word, 174 digital signatures for macros, 141 displaying. *See* viewing or displaying DIV/0! error, 29 dollar sign (\$) for absolute references, 62 specifying repeating rows and columns, 104 drawing AutoShapes, 49 DREAM HOUSE worksheet, 168

• E •

editing cell data, 16 cells copied into Word, 172 comments, 72 custom lists, 79 formulas, 25 tables in PowerPoint slides, 180 worksheets inserted into Word, 173 e-mail attaching workbook to, 105 hyperlinks for, 63 embedding worksheets into Word, 174 entering data. *See* data entry equal sign (=) for references, 61, 62 error checking for formulas, 149 error messages for formulas, 29 exporting Access data to Excel, 192–193

• F •

files deleting, 8 hyperlinks for, 63 opening an existing Excel file, 8 opening in different formats, 12 password-protecting, 60 saving as templates, 73, 166 saving in different formats, 12 searching by properties for, 12 filtering data advanced filtering, 124-125 AutoFilter for, 119-123 for blanks in selected field, 119 customizing AutoFilter, 119, 122 for data (NonBlanks) in selected field, 119 finding multiple criteria, 123 overview, 117 secondary filter selection, 120 Top 10 option, 119, 120 financial planning worksheets **OUR DREAM HOUSE, 168** OUR SAVINGS GOALS, 170 overview, 167 PAY OFF CREDIT CARD, 169 finding. See also filtering data all data occurrences, 82 cells based on format, 82 cells with data validation, 19

200

finding (continued) clip art, 51 data containing a word or value, 81 files by properties, 12 and replacing data, 83 tracing formula dependents, 30 fonts, 36, 44 footers, 102-103 form letter in Word using Excel list, 176-178 formatting. See also colors aligning data, 34 arrow styles, 47 AutoFormat feature for, 40, 132 cell borders, 45 column width, 38 Commission Calculator worksheet, 158 conditional, 46 copying, 40 dates, 37 finding cells based on format, 82 font attributes, 36 indenting data in cells, 35 Medical Bill Tracker worksheet, 162 merging cells to create a title, 35 PivotCharts, limitations on, 138 PivotTable values and text, 134 PivotTables using AutoFormat, 132 replacing data and, 83 rotating text, 37 row height, 39 styles for, 41 text boxes, 48 Value axis of chart, 95

values, 34 wrapping text in a cell, 36 formulas. See also functions absolute, defining, 26 adding to PivotTables, 137 amount due calculation, 161 auditing, 30 AutoSum button for adding numbers, 24 for average value, 24 commission calculation, 156-157 in Commission Calculator worksheet, 155-157 compound, creating, 23 copying with AutoFill, 25 counting sales, 156 editing, 25 error checking for, 149 Function Wizard for building, 27 hidden rows or columns and, 57 IF statements for, 28, 156–157 in Medical Bill Tracker worksheet, 160–161, 164 - 165merging data in columns, 148 in OUR DREAM HOUSE worksheet, 168 in OUR SAVINGS GOALS worksheet, 170 overview, 21 in PAY OFF CREDIT CARD worksheet, 169 payment calculation, 168, 169 references in, 61, 62 savings calculation, 170 simple, creating with operators, 21 totaling, 155, 157, 161, 164-165 troubleshooting errors, 29 freezing titles, 69

full screen view, 71 Function Wizard, 27 functions. *See also* formulas; *specific functions* arguments list for, 168 changing in PivotTables, 132 in Commission Calculator worksheet, 155–157 for hyperlinks, 63 inserting, 27 in Medical Bill Tracker worksheet, 160–161, 164–165 merging data in columns, 148 in OUR DREAM HOUSE worksheet, 168 in OUR SAVINGS GOALS worksheet, 170 overview, 21 in PAY OFF CREDIT CARD worksheet, 169

• G •

graphics adding to charts, 87, 92 arrows, 47 AutoShapes, 49 clip art, 51 customizing viewing options, 74 inserting hyperlinks, 63 inserting saved images, 50 manipulating, 52 shadows for AutoShapes, 49 text boxes, 48 3-dimensional, 50 graphs. See charts gridlines of charts, 87, 90, 92 colors, 104

printing, 104 showing or hiding in worksheets, 74 grouping PivotTable data, 136 rows or columns (outline groups), 115

• H •

headers, 102-103 headings collapsing and expanding for subtotals, 111 for Commission Calculator worksheet, 154 for Medical Bill Tracker worksheet, 160 printing, 104 height of rows adjusting, 39 hidden rows, 57 hiding. See also viewing or displaying cell comments, 72 collapsing subtotal headings, 111 customizing viewing options, 74 grand totals from PivotTable display, 132 Office Assistant, 9 open workbooks, 70 outlines, 114 PivotTable data, 131 rows or columns, 57 toolbars, 10 worksheets, 56 house payments worksheet, 168 hyperlinks, 63 hyphen (-), ignored during sort, 78

•1•

icons for SmartTags, 150 **TF** statements creating formulas using, 28 nested, for calculating commissions, 156-157 images. See graphics importing Excel data to Access table, 187-189 indenting data in cells, 35 inserting. See also copying; data entry arrows, 47 AutoCorrect entries, 149 cell comments, 72 clip art, 51 functions, 27 hyperlinks, 63 images, 50 special characters, 146 text boxes, 48 Word table columns or rows, 172 worksheets into Word, 173 worksheets into workbooks, 54 worksheets or charts into PowerPoint slides, 182

• [•

labels (mailing) in Word using Excel list, 178 labels on charts adding, 91 Category label, 86 options for, 90 Value label, 87 labels on spreadsheets, 13, 15 Landscape printing orientation, 101 legend of charts, 87, 90, 91 linking worksheets to Access database, 190–191 hyperlinks for, 63 into PowerPoint slides, 183 lists creating custom, 79 sorting custom, 80 Word mail merge form letter using, 176–178 Word mailing labels using, 178

• M •

macros assigning shortcut keys to, 142 creating a toolbar button for, 143 defined, 139 deleting, 144 digital signatures for, 141 locations for storing, 140 making available whenever you use Excel, 140 naming, 140 overview, 139 preventing from running when Excel starts, 143 recording, 139, 140 running, 139, 142 security for, 139, 141 stopping, 143 undoing not possible for, 142 mail merge form letter in Word using Excel list, 176-178 mailing labels in Word using Excel list, 178



margins, setting for printing, 102 Medical Bill Tracker worksheet calculating amount due, 161 creating totaling formulas, 160 duplicating the worksheet for family members, 163 entering headings, 160 formatting, 162 overview, 159 print settings, 162 protecting, 163 saving as a template, 166 specifying data validation, 161 totaling formulas for, 160 totals worksheet, 164-165 menus conventions in this book, 1 displaying all choices, 10 merging cells to create a title, 35 data in columns, 148 moving items charts, 93 graphics, 52 Office Assistant, 9

• N •

NAME# error, 29 names for macros, 140 for PivotTable formulas, 137 for range of cells, 18 renaming PivotTable fields, 134 renaming worksheets, 55 rules for worksheets, 55 NPER function, 169

• () •

Office Assistant, 6, 9 opening Excel, 6 existing Excel file, 8 files in different formats, 12 new, blank workbook, 7 preventing macros from running when opening Excel, 143 templates, 73 operators creating simple formulas with, 21 in PivotTable formulas, 137 Rule of Priorities, 23 organization charts, creating, 96 orientation for printing, 101 **OUR DREAM HOUSE worksheet**, 168 OUR SAVINGS GOALS worksheet, 170 outlines AutoOutline feature, 114 collapsing and expanding subtotal headings, 111 controlling individual subtotals, 111 copying subtotals, 113 creating multiple subtotals, 112 forming groups, 115 generating subtotals, 110 hiding, 114

outlines (*continued*) overview, 109 removing items from a group, 115 removing subtotals, 113

• p •

page breaks adding manually, 100 between subtotal groups, 110 page fields for PivotTables, 133 Page Setup dialog box, 101-104, 162 pages of PivotTables, 130 paper size and orientation for printing, 101 passwords for files, 60 for protected worksheets, 59 Paste Special, copying values using, 26 PAY OFF CREDIT CARD worksheet, 169 payment worksheets. See financial planning worksheets percent of totals, calculating in PivotTables, 136 Personal Workbook deleting macros from, 144 storing macros in, 140 pictures. See graphics PivotCharts, 138 PivotTable and PivotChart Wizard, 129 **PivotTables** adding your own calculations, 137 AutoFormats for, 132 calculating percent of totals, 136 changing the calculation type, 132

creating, 128-130 creating PivotCharts from, 138 data source for, 129 deleting separate PivotTables, 133 displaying details for data, 131 elements of, 129-130 formatting values and text, 134 generating multilevel totals, 135 generating separate PivotTables, 133 grouping data, 136 hiding data, 131 organizing data for, 128 overview, 127 page fields, 133 removing calculated fields, 137 removing grand totals from display, 132 removing unwanted fields, 131 renaming fields, 134 updating (refreshing data), 131 plot area of charts, 87 PMT function, 168, 170 Portrait printing orientation, 101 PowerPoint slides copying cells into, 180 deleting tables in, 180 dragging charts into, 181 editing tables in, 180 inserting worksheets or charts into, 182 linking worksheets into, 183 previewing before printing, 99 printing adding page breaks manually for, 100 charts, 105

204

Index

checking spelling before, 97, 98 clearing the print area, 101 fitting worksheets on the page, 101 gridlines, 104 header or footer, 102-103 headings for rows and columns, 104 Page Setup dialog box for, 101-104 paper size and orientation for, 101 previewing before, 99 repeating rows and columns, 104 selected area, 100 setting margins for, 102 settings for Medical Bill Tracker worksheet, 162 specifying the print area, 100 worksheets or workbooks, 105 properties searching for files by, 12 specifying for workbooks, 11 protection. See security

• R •

ranges of cells, naming, 18 recording macros, 139, 140 references absolute, 62 to another cell in the same worksheet, 62 to another worksheet, generating, 61 cross-referencing other workbooks, 62 including in formulas, 61 recording macros and, 140 R1C1 style for, 74 refreshing data. See updating relocking cells, 58 removing. See deleting or removing renaming. See names repeating rows and columns, 104 replacing data with Find and Replace, 83 resizing column width in PowerPoint slides, 180 column width in Word tables, 172 column width in worksheets, 38 graphics, 52 row height in worksheets, 39 split window sections, 68 tables in Word, 173, 174 worksheets embedded into Word, 174 retirement savings worksheet, 170 R1C1 reference style, 74 rotating AutoShapes or arrows, 52 text, 37 rows in worksheets adjusting height, 39 freezing and unfreezing titles, 69 grouping and ungrouping, 115 hiding and unhiding, 57 printing headings, 104 repeating, 104 Rule of Priorities, 23 running macros, 139, 142

• 5 •

saving files in different formats, 12 workbook as template, 73, 166 workbook properties, 11 workbooks, 7 worksheets into Word, 173 savings calculation worksheet, 170 SAVINGS GOALS worksheet, 170 scientific notation, values displayed as, 15 screen. See windows searching. See finding security for macros, 139, 141 password-protecting files, 60 protecting the Commission Calculator worksheet, 158 protecting the Medical Bill Tracker worksheet, 163 protecting worksheets, 59 relocking cells, 58 unlocking cells, 58 unprotecting worksheets, 59 selecting active cell, 14 cells with data validation, 19 clearing a selection, 17 multiple cells, 17 PivotTable data to show, 131 shading cells, 44 shadows for AutoShapes, 49 shortcut keys, assigning to macros, 142

showing. See viewing or displaying slash (/) as division operator, 21 not allowed in worksheet names, 55 SmartTags feature, 150 sorting data custom lists, 79 by day or month, 80 by multiple criteria, 78 for multiple subtotals, 112 Sort command for, 77 toolbar buttons for, 76 before using subtotals, 109, 110 sounds for SmartTags, 150 special characters, inserting, 146 spell check, 97, 98 splitting data into multiple columns, 147 Excel screen, 68 outline groups, 115 spreadsheets. See worksheets stopping macros, 143 styles for formatting, 41 subtotals AutoOutline feature, 114 collapsing and expanding headings, 111 controlling individually, 111 copying, 113 generating, 110 generating in PivotTables, 135 multiple, creating, 112 page breaks between groups, 110 removing, 113 sorting before using, 109, 110



SUM function, 157, 160–161, 164–165 SUMIF function, 155, 164–165 symbols, inserting, 146

• 7 •

templates, 73, 166 text. See also cells; data entry; formatting adding to AutoShapes, 49 annotating with text boxes, 48 cell comments, 72 fonts, 36, 44 joining using ampersand, 148 rotating, 37 wrapping in cells, 36 text boxes, 48 3-dimensional effects AutoShapes, 50 charts, 94 tick marks, 87 tiling windows, 70 titles of charts, 86, 90, 91 freezing and unfreezing, 69 merging cells to create, 35 toolbars creating buttons for macros, 143 creating custom, 146 described, 6 displaying or hiding, 10, 76 showing on two rows, 10 tracking medical expenses. See Medical Bill Tracker worksheet troubleshooting formula errors, 29

• 11 •

undoing data entry, 16 generating separate PivotTables and, 133 macros and, 142 unfreezing titles, 69 ungrouping rows or columns, 115 unhiding Personal Workbook, 144 rows or columns, 57 worksheets, 56 unlocking cells, 58 unprotecting worksheets, 59 updating (refreshing data) PivotTables, 131 worksheets linked into PowerPoint slides, 183

• 1/ •

validating data. *See* data validation #VALUE! error, 29 values alignment in cells, 15 copying using Paste Special, 26 defined, 13 entering in cells, 15 formatting in PivotTables, 134 formatting in spreadsheets, 34 viewing or displaying. *See also* filtering data; finding; hiding all menu choices, 10 arranging windows, 70 cell comments, 72 viewing or displaying (continued) comparing spreadsheets, 71 customizing viewing options, 74 full screen view, 71 PivotTable data details, 131 previewing before printing, 99 R1C1 reference style, 74 splitting the Excel screen, 68 subtotal headings, collapsing and expanding, 111 toolbars, 10, 76 toolbars on two rows, 10 tracing formula dependents, 30 unhiding rows or columns, 57 unhiding worksheets, 56 zooming in or out, 68

• W •

Web sites, hyperlinks for, 63 width of columns adjusting in worksheets, 38 hidden columns, 57 in PowerPoint slides, 180 in Word tables, 172 windows arranging, 70 customizing viewing options, 74 full screen view, 71 splitting the screen, 68 Word copying cells into, 172 copying tables to Excel, 175

creating mail merge form letter using Excel list, 176-178 creating mailing labels using Excel list, 178 deleting tables, 172, 173, 174 editing inserted cells, 172 editing inserted worksheets, 173 embedding worksheets into, 174 resizing tables, 173, 174 saving worksheets into, 173 workbooks attaching to e-mail, 105 automatic prompt for setting properties, 11 changing worksheet tab colors, 56 closing, 6 comparing side by side, 71 creating new, 7 cross-referencing other workbooks, 62 default worksheets in, 53 defined, 53 hiding an open workbook, 70 inserting worksheets, 54 maximum worksheets per workbook, 53 printing, 105 saving, 7 saving worksheets into Word, 173 specifying properties, 11 worksheets attaching to e-mail, 105 changing tab colors, 56 comparing side by side, 71 copying, 55 copying data to Access table, 186 default number created, 53



Index

defined, 53 deleting, 54 embedding into Word, 174 fitting on the page, 101 hiding and unhiding, 56 importing data to Access table, 187–189 inserting, 54 inserting into PowerPoint slides, 182 linking into PowerPoint slides, 183 linking to Access database, 190–191 maximum number per workbook, 53 moving between, 14 printing, 105 protecting, 59 referencing another worksheet, 61 renaming, 55 rules for naming, 55 saving into Word, 173 splitting data into multiple columns, 147 unprotecting, 59 wrapping text in cells, 36

• Z •

zooming in or out, 68

| Notes | | | | | |
|-------|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |