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Greg Harvey, PhD

*Bestselling author of Excel
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by Greg Harvey, PhD



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About the Author

Greg Harvey has authored tons of computer books, the most recent being *Excel Workbook For Dummies* and *Roxio Easy Media Creator 8 For Dummies*, and the most popular being *Excel 2003 For Dummies* and *Excel 2003 All-in-One Desk Reference For Dummies*. He started out training business users on how to use IBM personal computers and their attendant computer software in the rough and tumble days of DOS, WordStar, and Lotus 1-2-3 in the mid-80s of the last century. After working for a number of independent training firms, Greg went on to teach semester-long courses in spreadsheet and database management software at Golden Gate University in San Francisco.

His love of teaching has translated into an equal love of writing. For Dummies books are, of course, his all-time favorites to write because they enable him to write to his favorite audience: the beginner. They also enable him to use humor (a key element to success in the training room) and, most delightful of all, to express an opinion or two about the subject matter at hand.

Greg received his doctorate degree in Humanities in Philosophy and Religion with a concentration in Asian Studies and Comparative Religion last May. Everyone is glad that Greg was finally able to get out of school before he retired.

Dedication

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Introduction

I'm very proud to present you with *Excel 2010 For Dummies*, the latest version of everybody's favorite book on Microsoft Office Excel for readers with no intention whatsoever of becoming spreadsheet gurus.

Excel 2010 For Dummies covers all the fundamental techniques you need to know in order to create, edit, format, and print your own worksheets. In addition to showing you around the worksheet, this book also exposes you to the basics of charting, creating data lists, and performing data analysis. Keep in mind, though, that this book just touches on the easiest ways to get a few things done with these features — I don't attempt to cover charting, data lists, or data analysis in the same definitive way as spreadsheets: This book concentrates on spreadsheets because spreadsheets are what most regular folks create with Excel.

About This Book

This book isn't meant to be read cover to cover. Although its chapters are loosely organized in a logical order (progressing as you might when studying Excel in a classroom situation), each topic covered in a chapter is really meant to stand on its own.

Each discussion of a topic briefly addresses the question of what a particular feature is good for before launching into how to use it. In Excel, as with most other sophisticated programs, you usually have more than one way to do a task. For the sake of your sanity, I have purposely limited the choices by usually giving you only the most efficient ways to do a particular task. Later, if you're so tempted, you can experiment with alternative ways of doing a task. For now, just concentrate on performing the task as I describe.

As much as possible, I've tried to make it unnecessary for you to remember anything covered in another section of the book. From time to time, however, you will come across a cross-reference to another section or chapter in the book. For the most part, such cross-references are meant to help you get more complete information on a subject, should you have the time and interest. If you have neither, no problem. Just ignore the cross-references as if they never existed.

How to Use This Book

This book is similar to a reference book. You can start by looking up the topic you need information about (in either the Table of Contents or the index) and then refer directly to the section of interest. I explain most topics conversationally (as though you were sitting in the back of a classroom where you can safely nap). Sometimes, however, my regiment-commander mentality takes over, and I list the steps you need to take to accomplish a particular task in a particular section.

What You Can Safely Ignore

When you come across a section that contains the steps you take to get something done, you can safely ignore all text accompanying the steps (the text that isn't in bold) if you have neither the time nor the inclination to wade through more material.

Whenever possible, I have also tried to separate background or footnote-type information from the essential facts by exiling this kind of junk to a sidebar (look for blocks of text on a gray background). Often, these sections are flagged with icons that let you know what type of information you will encounter there. You can easily disregard text marked this way. (I'll scoop you on the icons I use in this book a little later.)

Foolish Assumptions

I'm going to make only one assumption about you (let's see how close I get): You have access to a PC (at least some of the time) that is running Windows 7, Windows Vista, or Windows XP and on which Microsoft Office Excel 2010 is installed. Having said that, I don't assume that you've ever launched Excel 2010, let alone done anything with it.



This book is intended for users of Microsoft Office Excel 2010. If you're using Excel for Windows version Excel 97 through 2003, the information in this book will only confuse and confound you because only Excel 2007 works similar to the 2010 version that this book describes.

If you're working with a version of Excel earlier than Excel 2007, please put this book down slowly and pick up a copy of *Excel 2003 For Dummies* instead.

How This Book Is Organized

This book is organized in six parts (which gives you a chance to see at least six of those great Rich Tennant cartoons!). Each part contains two or more chapters (to keep the editors happy) that more or less go together (to keep you happy). Each chapter is divided further into loosely related sections that cover the basics of the topic at hand. However, don't get hung up on following the structure of the book; ultimately, it doesn't matter whether you find out how to edit the worksheet before you learn how to format it, or whether you figure out printing before you learn editing. The important thing is that you find the information — and understand it when you find it — when you need to perform a particular task.

In case you're interested, a synopsis of what you find in each part follows.

Part I: Getting In on the Ground Floor

As the name implies, in this part I cover such fundamentals as how to start the program, identify the parts of the screen, enter information in the worksheet, save a document, and so on. If you're starting with absolutely no background in using spreadsheets, you definitely want to glance at the information in Chapter 1 to discover the secrets of the Ribbon interface before you move on to how to create new worksheets in Chapter 2.

Part II: Editing without Tears

In this part, I show you how to edit spreadsheets to make them look good, including how to make major editing changes without courting disaster. Peruse Chapter 3 when you need information on formatting the data to improve the way it appears in the worksheet. See Chapter 4 for rearranging, deleting, or inserting new information in the worksheet. Read Chapter 5 for the skinny on printing your finished product.

Part III: Getting Organized and Staying That Way

Here I give you all kinds of information on how to stay on top of the data that you've entered into your spreadsheets. Chapter 6 is full of good ideas on how to keep track of and organize the data in a single worksheet. Chapter 7 gives

you the ins and outs of working with data in different worksheets in the same workbook and gives you information on transferring data between the sheets of different workbooks.

Part IV: Digging Data Analysis

This part consists of two chapters. Chapter 8 introduces performing various types of what-if analysis in Excel, including setting up data tables with one and two inputs, performing goal seeking, and creating different cases with Scenario Manager. Chapter 9 introduces Excel's vastly improved pivot table and pivot chart capabilities that enable you to summarize and filter vast amounts of data in a worksheet table or data list in a compact tabular or chart format.

Part V: Life beyond the Spreadsheet

In Part V, I explore some of the other aspects of Excel besides the spreadsheet. In Chapter 10, you find out just how ridiculously easy it is to create a chart using the data in a worksheet. In Chapter 11, you discover just how useful Excel's data list capabilities can be when you have to track and organize a large amount of information. In Chapter 12, you find out about using add-in programs to enhance Excel's basic features, adding hyperlinks to jump to new places in a worksheet, to new documents, and even to Web pages, as well as how to record macros to automate your work.

Part VI: The Part of Tens

As is the tradition in *For Dummies* books, the last part contains lists of the top ten most useful and useless facts, tips, and suggestions. In this part, you find three chapters. Chapter 13 provides my top ten list of the best new features in Excel 2010 (and boy was it hard keeping it to just ten). Chapter 14 gives you the top ten beginner basics you need to know as you start using this program. Chapter 15 gives you the King James Version of the Ten Commandments of Excel 2010. With this chapter under your belt, how canst thou goest astray?

Conventions Used in This Book

The following information gives you the lowdown on how things look in this book. Publishers call these items the book's *conventions* (no campaigning, flag-waving, name-calling, or finger-pointing is involved, however).

Throughout the book, you'll find Ribbon command sequences (the name on the tab on the Ribbon and the command button you select) separated by a command arrow, as in:

Home↔Copy

This shorthand is the Ribbon command that copies whatever cells or graphics are currently selected to the Windows Clipboard. It means that you click the Home tab on the Ribbon (if it isn't displayed already) and then click the Copy button (that sports the traditional side-by-side page icon).

Some of the Ribbon command sequences involve not only selecting a command button on a tab but then also selecting an item on a drop-down menu. In this case, the drop-down menu command follows the name of the tab and command button, all separated by command arrows, as in:

Formulas↔Calculation Options↔Manual

This shorthand is the Ribbon command sequence that turns on manual recalculation in Excel. It says that you click the Formulas tab (if it isn't displayed already) and then click the Calculation Options button followed by the Manual drop-down menu option.

Although you use the mouse and keyboard shortcut keys to move your way in, out, and around the Excel worksheet, you do have to take some time to enter the data so that you can eventually mouse around with it. Therefore, this book occasionally encourages you to type something specific into a specific cell in the worksheet. Of course, you can always choose not to follow the instructions. When I tell you to enter a specific function, the part you should type generally appears in **bold** type. For example, **=SUM(A2:B2)** means that you should type exactly what you see: an equal sign, the word **SUM**, a left parenthesis, the text **A2:B2** (complete with a colon between the letter-number combos), and a right parenthesis. You then, of course, have to press Enter to make the entry stick.

Occasionally, I give you a *hot key combination* that you can press in order to choose a command from the keyboard rather than clicking buttons on the Ribbon with the mouse. Hot key combinations are written like this: Alt+FS or Ctrl+S (both of these hot key combos save workbook changes).

With the Alt key combos, you press the Alt key until the hot key letters appear in little squares all along the Ribbon. At that point, you can release the Alt key and start typing the hot key letters (by the way, you type all lowercase hot key letters — I only put them in caps to make them stand out in the text).

Hot key combos that use the Ctrl key are of an older vintage and work a little bit differently. You have to hold down the Ctrl key while you type the hot key letter (though again, type only lowercase letters unless you see the Shift key in the sequence, as in Ctrl+Shift+C).

Excel 2010 uses only one pull-down menu (File) and one toolbar (the Quick Access toolbar). You open the File pull-down menu by clicking the File tab or pressing Alt+F. The Quick Access toolbar with its four buttons appears to the immediate right of the File tab.

Finally, if you're really observant, you may notice a discrepancy in how the names of dialog box options (such as headings, option buttons, and check boxes) appear in the text and how they actually appear in Excel on your computer screen. I intentionally use the convention of capitalizing the initial letters of all the main words of a dialog box option to help you differentiate the name of the option from the rest of the text describing its use.

Icons Used in This Book

The following icons are placed in the margins to point out stuff you may or may not want to read.



This icon alerts you to nerdy discussions that you may well want to skip (or read when no one else is around).



This icon alerts you to shortcuts or other valuable hints related to the topic at hand.



This icon alerts you to information to keep in mind if you want to meet with a modicum of success.



This icon alerts you to information to keep in mind if you want to avert complete disaster.

Where to Go from Here

If you've never worked with a computer spreadsheet, I suggest that, right after getting your chuckles with the cartoons, you first go to Chapter 1 and find out what you're dealing with. If you're someone with some experience

with earlier versions of Excel, I want you to head directly to the section, “Migrating to Excel 2010 from Earlier Versions Using Pull-down Menus” in Chapter 1, where you find out how to stay calm as you become familiar and, yes, comfortable with the Ribbon user interface.

Then, as specific needs arise (such as, “How do I copy a formula?” or “How do I print just a particular section of my worksheet?”), you can go to the Table of Contents or the index to find the appropriate section and go right to that section for answers.

Part I

Getting In on the Ground Floor

The 5th Wave

By Rich Tennant



"According to your current physical symptoms,
you'll be bald well before you're fat."

In this part . . .

In this part, I break down the Excel user interface and make sense of the tabs and command buttons you're going to face day after day after day. Of course, it does you no good just to know what's what onscreen; you need to be able to use all these bells and whistles (or buttons and boxes in this case). Therefore, I also show you how to use some of the more prominent buttons and boxes to enter your spreadsheet data. From this humble beginning, it's a quick trip to total screen mastery.

Chapter 1

The Excel 2010 User Experience

In This Chapter

- ▶ Getting familiar with the Excel 2010 program window and Backstage View
 - ▶ Selecting commands from the Ribbon
 - ▶ Customizing the Quick Access toolbar
 - ▶ Methods for starting Excel 2010
 - ▶ Surfing an Excel 2010 worksheet and workbook
 - ▶ Getting some help with using this program
 - ▶ Quick start for users migrating to Excel 2010 from earlier versions using pull-down menus
-

The Excel 2010 user interface, like Excel 2007, scraps its reliance on a series of pull-down menus, task panes, and multitudinous toolbars. Instead, it uses a single strip at the top of the worksheet called the Ribbon that puts the bulk of the Excel commands you use at your fingertips at all times.

Add to the Ribbon a File tab and a Quick Access toolbar — along with a few remaining task panes (Clipboard, Clip Art, and Research) — and you end up with the handiest way to crunch your numbers, produce and print polished financial reports, as well as organize and chart your data. In other words, to do all the wonderful things for which you rely on Excel.

Best of all, this new and improved Excel user interface includes all sorts of graphical improvements. Foremost is Live Preview that shows you how your actual worksheet data would appear in a particular font, table formatting, and so on before you actually select it. Additionally, Excel 2010 supports an honest to goodness Page Layout View that displays rulers and margins along with headers and footers for every worksheet and has a zoom slider at the bottom of the screen that enables you to zoom in and out on the spreadsheet data instantly. Finally, Excel 2010 is full of pop-up galleries that make spreadsheet formatting and charting a real breeze, especially in tandem with Live Preview.

Excel's Ribbon User Interface

When you launch Excel 2010, the program opens the first of three new worksheets (named Sheet1) in a new workbook file (named Book1) inside a program window like the one shown in Figure 1-1.

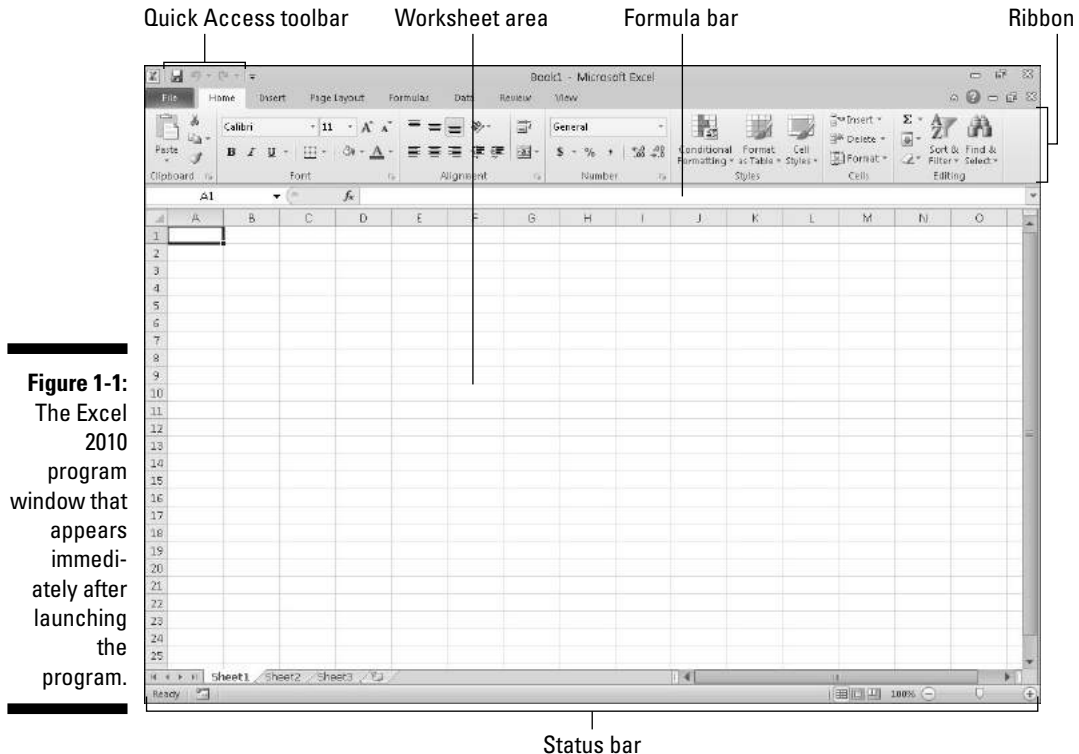


Figure 1-1:
The Excel 2010 program window that appears immediately after launching the program.

The Excel program window containing this worksheet of the workbook contains the following components:

- **File tab** that when clicked opens the new Backstage View — a menu on the left that contains all the document- and file-related commands, including Info (selected by default), Save, Save As, Open, Close, Recent, New, Print, and Save & Send. Additionally, there's a Help option with add-ins, an Options item that enables you to change many of Excel's default settings, and an Exit option to quit the program.
- Customizable **Quick Access toolbar** that contains buttons you can click to perform common tasks, such as saving your work and undoing and redoing edits.

- ✓ **Ribbon** that contains the bulk of the Excel commands arranged into a series of tabs ranging from Home through View.
- ✓ **Formula bar** that displays the address of the current cell along with the contents of that cell.
- ✓ **Worksheet area** that contains the cells of the worksheet identified by column headings using letters along the top and row headings using numbers along the left edge; tabs for selecting new worksheets; a horizontal scroll bar to move left and right through the sheet; and a vertical scroll bar to move up and down through the sheet.
- ✓ **Status bar** that keeps you informed of the program's current mode and any special keys you engage, and enables you to select a new worksheet view and to zoom in and out on the worksheet.

Going Backstage via File

To the immediate left of the Home tab on the Ribbon right below the Quick Access toolbar, you find the File tab.

When you click File, the new Backstage View opens. This view contains a menu similar to the one shown in Figure 1-2. When you open the Backstage View, the Info option displays at-a-glance stats about the Excel workbook file you have opened and active in the program.

Figure 1-2:
Open Backstage View to get at-a-glance information about the current file, access all file-related commands, and modify the program options.



This information panel is divided into two panes. The pane on the left contains large buttons that enable you to modify the workbook's permissions, distribution, and versions. The pane on the right contains a thumbnail of the workbook followed by a list of fields detailing the workbook's various Document Properties, some of which you can change (such as Title, Tags, Categories, and Author), and many of which you can't (such as Size, Last Modified, Created, and so forth).

Above the Info option, you find the commands (Save, Save As, Open, and Close) you commonly need for working with Excel workbook files. Near the bottom, the File tab contains a Help option that, when selected, displays a Support panel in the Backstage View. This panel contains options for getting help on using Excel, customizing its default settings, as well as checking for updates to the Excel 2010 program. Below Help, you find options that you can select to change the program's settings, along with an Exit option that you can select when you're ready to close the program.



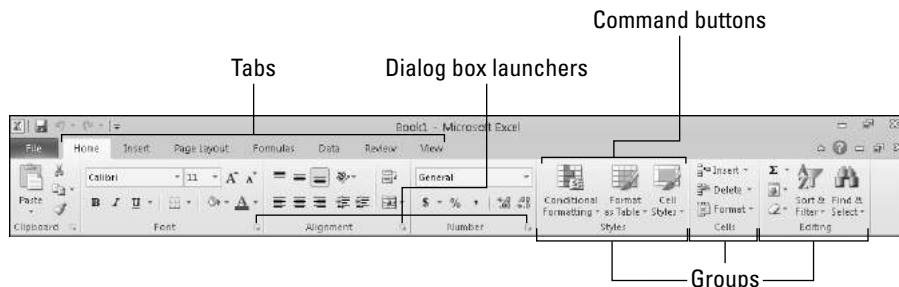
Click the Recent option to continue editing an Excel workbook you've worked on of late. When you click the Recent option, Excel displays a panel with a list of all the workbook files recently opened in the program. To re-open a particular file for editing, all you do is click its filename in this list.

To close the Backstage View and return to the normal worksheet view, you can click the File tab a second time or simply press the Escape key.

Bragging about the Ribbon

The Ribbon (shown in Figure 1-3) changes the way you work in Excel 2010. Instead of having to memorize (or guess) on which pull-down menu or toolbar Microsoft put the particular command you want to use, their designers and engineers came up with the Ribbon that shows you the most commonly used options needed to perform a particular Excel task.

Figure 1-3:
Excel's Ribbon consists of a series of tabs containing command buttons arranged into different groups.



The Ribbon contains the following components:

- ✔ **Tabs** for each of Excel's main tasks that bring together and display all the commands commonly needed to perform that core task.
- ✔ **Groups** that organize related command buttons into subtasks normally performed as part of the tab's larger core task.
- ✔ **Command buttons** within each group that you select to perform a particular action or to open a gallery from which you can click a particular thumbnail. **Note:** Many command buttons on certain tabs of the Ribbon are organized into mini-toolbars with related settings.
- ✔ **Dialog box launcher** in the lower-right corner of certain groups that opens a dialog box containing a bunch of additional options you can select.



TIP

To display more of the Worksheet area in the program window, you can minimize the Ribbon so that only its tabs display. Simply click the Minimize the Ribbon button, the first button with what looks like a greater than symbol pointing upward in the group of buttons for minimizing, maximizing, and closing the current worksheet window to the right of the Ribbon tabs and to the immediate left of the Help button. You can also double-click any one of the Ribbon's tabs, or just press Ctrl+F1. To redisplay the entire Ribbon, and keep all the command buttons on its tabs displayed in the program window, click the Expand the Ribbon button, double-click one of the tabs, or press Ctrl+F1 a second time.



REMEMBER

When you work in Excel with the Ribbon minimized, the Ribbon expands each time you click one of its tabs to show its command buttons, but that tab stays open only until you select one of the command buttons. The moment you select a command button, Excel immediately minimizes the Ribbon again and just displays its tabs.

Keeping tabs on the Excel Ribbon

The first time you launch Excel 2010, its Ribbon contains the following tabs from left to right:

- ✔ **Home** tab with the command buttons normally used when creating, formatting, and editing a spreadsheet, arranged into the Clipboard, Font, Alignment, Number, Styles, Cells, and Editing groups.
- ✔ **Insert** tab with the command buttons normally used when adding particular elements (including graphics, PivotTables, charts, hyperlinks, and headers and footers) to a spreadsheet, arranged into the Tables, Illustrations, Charts, Sparklines, Filter, Links, Text, and Symbols groups.
- ✔ **Page Layout** tab with the command buttons normally used when preparing a spreadsheet for printing or re-ordering graphics on the sheet, arranged into the Themes, Page Setup, Scale to Fit, Sheet Options, and Arrange groups.

- ✓ **Formulas** tab with the command buttons normally used when adding formulas and functions to a spreadsheet or checking a worksheet for formula errors, arranged into the Function Library, Defined Names, Formula Auditing, and Calculation groups. **Note:** This tab also contains a Solutions group when you activate certain add-in programs, such as Analysis ToolPak and Euro Currency Tools. See Chapter 12 for more on using Excel add-in programs.
- ✓ **Data** tab with the command buttons normally used when importing, querying, outlining, and subtotaling the data placed into a worksheet's data list, arranged into the Get External Data, Connections, Sort & Filter, Data Tools, and Outline groups. **Note:** This tab also contains an Analysis group when you activate add-ins, such as Analysis ToolPak and Solver. See Chapter 12 for more on Excel add-ins.
- ✓ **Review** tab with the command buttons normally used when proofing, protecting, and marking up a spreadsheet for review by others, arranged into the Proofing, Language, Comments, and Changes groups. **Note:** This tab also contains an Ink group with a sole Start Inking button when you're running Office 2010 on a Tablet PC or a computer equipped with a digital ink tablet.
- ✓ **View** tab with the command buttons normally used when changing the display of the Worksheet area and the data it contains, arranged into the Workbook Views, Show, Zoom, Window, and Macros groups.



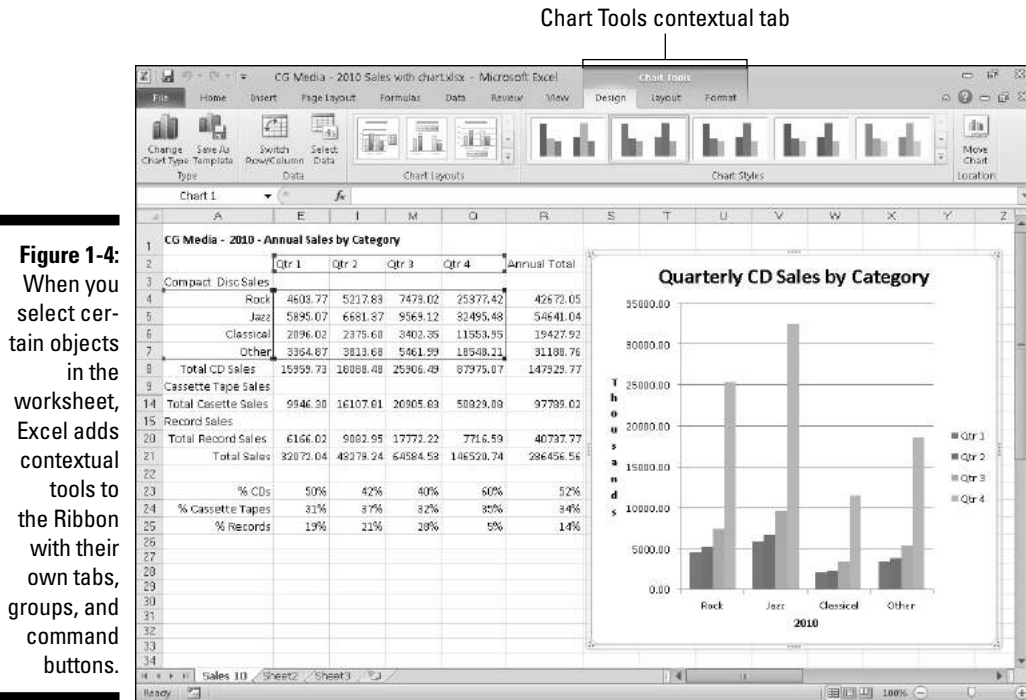
In addition to these standard seven tabs, Excel has an eighth, optional Developer tab that you can add to the Ribbon if you do a lot of work with macros and XML files. See Chapter 12 for more on the Developer tab.

Although these standard tabs are the ones you always see on the Ribbon when it displays in Excel, they aren't the only things that can appear in this area. Excel can display contextual tools when you're working with a particular object that you select in the worksheet, such as a graphic image you've added or a chart or PivotTable you've created. The name of the contextual tools for the selected object appears immediately above the tab or tabs associated with the tools.

For example, Figure 1-4 shows a worksheet after you click the embedded chart to select it. As you can see, doing this adds the contextual tool called Chart Tools to the very end of the Ribbon. The Chart Tools contextual tool has its own three tabs: Design (selected), Layout, and Format. Note, too, that the command buttons on the Design tab are arranged into groups Type, Data, Chart Layouts, Chart Styles, Location, and Mode.



The moment you deselect the object (usually by clicking somewhere outside the object's boundaries), the contextual tool for that object and all its tabs immediately disappear from the Ribbon, leaving only the regular tabs — Home, Insert, Page Layout, Formulas, Data, Review, and View — displayed.



Selecting commands from the Ribbon

The most direct method for selecting commands on the Ribbon is to click the tab that contains the command button you want and then click that button in its group. For example, to insert a piece of clip art into your spreadsheet, you click the Insert tab and then click the Clip Art button to open the Clip Art task pane in the Worksheet area.

The easiest method for selecting commands on the Ribbon — if you know your keyboard well — is to press the Alt key and then type the sequence of letters designated as the hot keys for the desired tab and associated command buttons.

When you press and release the Alt key, Excel displays the hot keys for all the tabs on the Ribbon. When you type one of the Ribbon tab hot keys to select it, all the command button hot keys appear along with the hot keys for the dialog box launchers (see Figure 1-5). To select a command button or dialog box launcher, simply type its hot key letter(s).

Figure 1-5:
Excel hot
keys for
selecting
command
buttons and
dialog box
launchers.



If you know the old Excel shortcut keys from versions Excel 97 through 2003, you can still use them. For example, instead of going through the rigmarole of pressing Alt+HC to copy a cell selection to the Office Clipboard and then Alt+HV to paste it elsewhere in the sheet, you can still press Ctrl+C to copy the selection and then press Ctrl+V when you're ready to paste it. Note, however, that when using a hot key combination with the Alt key, you don't need to keep the Alt key depressed while typing the remaining letter(s) as you do when using a shortcut key combo with the Ctrl key.

Customizing the Quick Access toolbar

When you start using Excel 2010, the Quick Access toolbar contains only the following few buttons:

- ✓ **Save** to save any changes made to the current workbook using the same filename, file format, and location
- ✓ **Undo** to undo the last editing, formatting, or layout change you made
- ✓ **Redo** to reapply the previous editing, formatting, or layout change that you just removed with the Undo button

The Quick Access toolbar is very customizable because Excel makes it easy to add any Ribbon command to it. Moreover, you're not restricted to adding buttons for just the commands on the Ribbon; you can add any Excel command you want to the toolbar, even the obscure ones that don't rate an appearance on any of its tabs.



By default, the Quick Access toolbar appears above the Ribbon tabs immediately to the right of the Excel program button (used to resize the workbook window or quit the program). To display the toolbar beneath the Ribbon immediately above the Formula bar, click the Customize Quick Access Toolbar button (the drop-down button to the right of the toolbar with a horizontal bar

above a down-pointing triangle) and then click Show Below the Ribbon on its drop-down menu. You will definitely want to make this change if you start adding more buttons to the toolbar so that the growing Quick Access toolbar doesn't start crowding the name of the current workbook that appears to the toolbar's right.

Adding command buttons on the Customize Quick Access Toolbar's drop-down menu

When you click the Customize Quick Access Toolbar button, a drop-down menu appears containing the following commands:

- ✓ **New** to open a new workbook
- ✓ **Open** to display the Open dialog box for opening an existing workbook
- ✓ **Save** to save changes to your current workbook
- ✓ **E-mail** to open your mail
- ✓ **Quick Print** to send the current worksheet to your default printer
- ✓ **Print Preview** to open the Print settings in Backstage View with a preview of the current worksheet in the right pane
- ✓ **Spelling** to check the current worksheet for spelling errors
- ✓ **Undo** to undo your latest worksheet edit
- ✓ **Redo** to reapply the last edit that you removed with Undo
- ✓ **Sort Ascending** to sort the current cell selection or column in A to Z alphabetical order, lowest to highest numerical order, or oldest to newest date order
- ✓ **Sort Descending** to sort the current cell selection or column in Z to A alphabetical order, highest to lowest numerical order, or newest to oldest date order

When you open this menu, only the Save, Undo, and Redo options are selected (indicated by the check marks); therefore, these buttons are the only buttons to appear on the Quick Access toolbar. To add any of the other commands on this menu to the toolbar, you simply click the option on the drop-down menu. Excel then adds a button for that command to the end of the Quick Access toolbar (and a check mark to its option on the drop-down menu).

To remove a command button that you add to the Quick Access toolbar in this manner, click the option a second time on the Customize Quick Access Toolbar button's drop-down menu. Excel removes its command button from the toolbar and the check mark from its option on the drop-down menu.

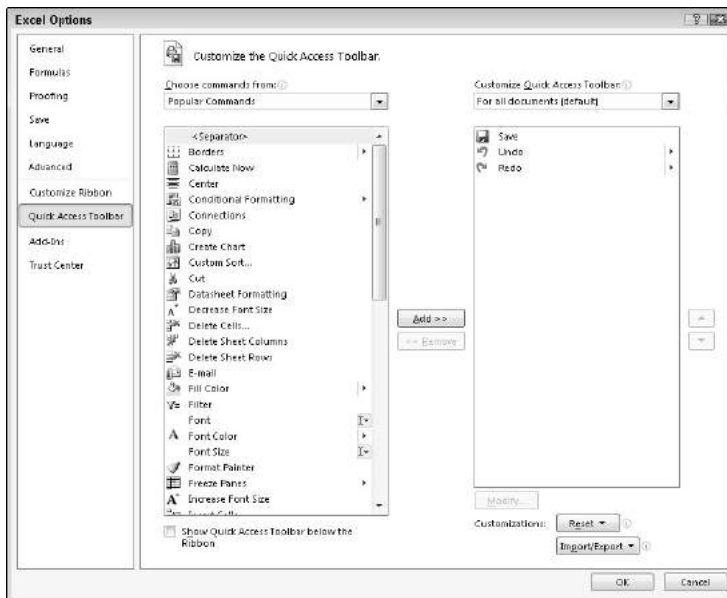
Adding command buttons on the Ribbon

To add a Ribbon command to the Quick Access toolbar, simply right-click its command button on the Ribbon and then click Add to Quick Access Toolbar on its shortcut menu. Excel then immediately adds the command button to the very end of the Quick Access toolbar, immediately in front of the Customize Quick Access Toolbar button.

If you want to move the command button to a new location on the Quick Access toolbar or group it with other buttons on the toolbar, click the Customize Quick Access Toolbar button and then click the More Commands option near the bottom of its drop-down menu.

Excel then opens the Excel Options dialog box with the Quick Access Toolbar tab selected (similar to the one shown in Figure 1-6). On the right side of the dialog box, Excel shows all the buttons added to the Quick Access toolbar. The order in which they appear from left to right on the toolbar corresponds to the top-down order in the list box.

Figure 1-6:
Use the buttons on the Quick Access Toolbar tab of the Excel Options dialog box to customize the appearance of the Quick Access toolbar.



To reposition a particular button on the toolbar, click it in the list box on the right and then click either the Move Up button (the one with the black triangle pointing upward) or the Move Down button (the one with

the black triangle pointing downward) until the button is promoted or demoted to the desired position on the toolbar.



You can add vertical separators to the toolbar to group related buttons. To do this, click the <Separator> option in the list box on the left and then click the Add button twice to add two. Then, click the Move Up or Move Down button to position one of the two separators at the beginning of the group and the other at the end.

To remove a button added from the Ribbon, right-click it on the Quick Access toolbar and then click the Remove from Quick Access Toolbar option on its shortcut menu.

Adding non-Ribbon commands to the Quick Access toolbar

You can also use the options on the Quick Access Toolbar tab of the Excel Options dialog box (refer to Figure 1-6) to add a button for any Excel command even if it isn't one of those displayed on the tabs of the Ribbon:

- 1. Click the type of command you want to add to the Quick Access toolbar in the Choose Commands From drop-down list box.**

The types of commands include the Popular Commands pull-down menu (the default) as well as each of the tabs that appear on the Ribbon. To display only the commands that are not displayed on the Ribbon, click Commands Not in the Ribbon near the top of the drop-down list. To display a complete list of the Excel commands, click All Commands near the top of the drop-down list.

- 2. Click the command whose button you want to add to the Quick Access toolbar in the list box on the left.**
- 3. Click the Add button to add the command button to the bottom of the list box on the right.**
- 4. (Optional) To reposition the newly added command button so that it isn't the last one on the toolbar, click the Move Up button until it's in the desired position.**
- 5. Click the OK button to close the Excel Options dialog box.**



If you've created favorite macros (see Chapter 12) that you routinely use and want to be able to run directly from the Quick Access toolbar, click Macros in the Choose Commands From drop-down list box in the Excel Options dialog box and then click the name of the macro to add followed by the Add button.

Having fun with the Formula bar

The Formula bar displays the cell address (determined by a column letter(s) followed by a row number) and the contents of the current cell. For example, cell A1 is the first cell of each worksheet at the intersection of column A and row 1; cell XFD1048576 is the last cell of each worksheet at the intersection of column XFD and row 1048576. The type of entry you make determines the contents of the current cell: text or numbers, for example, if you enter a heading or particular value, or the details of a formula if you enter a calculation.

The Formula bar has three sections:

- ✓ **Name box:** The left-most section that displays the address of the current cell address.
- ✓ **Formula bar buttons:** The second, middle section that appears as a rather nondescript button displaying only an indented circle on the left (used to narrow or widen the Name box) and the Insert Function button (labeled *fx*) on the right. When you start making or editing a cell entry, Cancel (an *X*) and Enter (a check mark) buttons appear between them.
- ✓ **Cell contents:** The third, right-most white area to the immediate right of the Insert Function button takes up the rest of the bar and expands as necessary to display really long cell entries that won't fit in the normal area.



The cell contents section of the Formula bar is important because it *always* shows you the contents of the cell even when the worksheet does not. (When you're dealing with a formula, Excel displays only the calculated result in the cell in the worksheet and not the formula by which that result is derived.) Additionally, you can edit the contents of the cell in this area at anytime. Similarly, when the cell contents area is blank, you know that the cell is empty as well.



How you assign 26 letters to 16,384 columns

When it comes to labeling the 16,384 columns of an Excel 2010 worksheet, our alphabet with its measly 26 letters is simply not up to the task. To make up the difference, Excel doubles the letters in the cell's column reference so that column AA follows column Z (after which you find column AB, AC, and so on) and then triples

them so that column AAA follows column ZZ (after which you get column AAB, AAC, and the like). At the end of this letter tripling, the 16,384th and last column of the worksheet ends up being XFD so that the last cell in the 1,048,576th row has the cell address XFD1048576!

What to do in the Worksheet area

The Worksheet area is where most of the Excel spreadsheet action takes place because it's the place that displays the cells in different sections of the current worksheet and it's right inside the cells that you do all your spreadsheet data entry and formatting, not to mention a great deal of your editing.



To enter or edit data in a cell, that cell must be current. Excel indicates that a cell is current in three ways:

- ✓ The cell cursor — the dark black border surrounding the cell's entire perimeter — appears in the cell.
- ✓ The address of the cell appears in the Name box of the Formula bar.
- ✓ The cell's column letter(s) and row number are shaded (in a kind of an orange-beige color on most monitors) in the column headings and row headings that appear at the top and left of the Worksheet area, respectively.

Moving around the worksheet

An Excel worksheet contains far too many columns and rows for all a worksheet's cells to be displayed at one time regardless of how large your personal computer monitor screen is or how high the screen resolution. (After all, we're talking 17,179,869,184 cells total!) Therefore, Excel offers many methods for moving the cell cursor around the worksheet to the cell where you want to enter new data or edit existing data:

- ✓ Click the desired cell — assuming that the cell is displayed within the section of the sheet visible in the Worksheet area.
Click the Name box, type the address of the desired cell, and then press the Enter key.
- ✓ Press F5 to open the Go To dialog box, type the address of the desired cell into its Reference text box, and then click OK.
- ✓ Use the cursor keys, as shown in Table 1-1, to move the cell cursor to the desired cell.
- ✓ Use the horizontal and vertical scroll bars at the bottom and right edge of the Worksheet area to move the part of the worksheet that contains the desired cell and then click the cell to put the cell cursor in it.

Keystroke shortcuts for moving the cell cursor

Excel offers a wide variety of keystrokes for moving the cell cursor to a new cell. When you use one of these keystrokes, the program automatically scrolls a new part of the worksheet into view, if this is required to move the cell pointer. In Table 1-1, I summarize these keystrokes, including how far each one moves the cell pointer from its starting position.

Table 1-1 Keystrokes for Moving the Cell Cursor	
<i>Keystroke</i>	<i>Where the Cell Cursor Moves</i>
→ or Tab	Cell to the immediate right.
← or Shift+Tab	Cell to the immediate left.
↑	Cell up one row.
↓	Cell down one row.
Home	Cell in Column A of the current row.
Ctrl+Home	First cell (A1) of the worksheet.
Ctrl+End or End, Home	Cell in the worksheet at the intersection of the last column that has data in it and the last row that has data in it (that is, the last cell of the so-called active area of the worksheet).
Page Up	Cell one full screen up in the same column.
Page Down	Cell one full screen down in the same column.
Ctrl+→ or End, →	First occupied cell to the right in the same row that is either preceded or followed by a blank cell. If no cell is occupied, the pointer goes to the cell at the very end of the row.
Ctrl+← or End, ←	First occupied cell to the left in the same row that is either preceded or followed by a blank cell. If no cell is occupied, the pointer goes to the cell at the very beginning of the row.
Ctrl+↑ or End, ↑	First occupied cell above in the same column that is either preceded or followed by a blank cell. If no cell is occupied, the pointer goes to the cell at the very top of the column.
Ctrl+↓ or End, ↓	First occupied cell below in the same column that is either preceded or followed by a blank cell. If no cell is occupied, the pointer goes to the cell at the very bottom of the column.
Ctrl+Page Down	The cell pointer's location in the next worksheet of that workbook.
Ctrl+Page Up	The cell pointer's location in the previous worksheet of that workbook.

Note: In the case of those keystrokes that use arrow keys, you must either use the arrows on the cursor keypad or else have the Num Lock disengaged on the numeric keypad of your keyboard.



The keystrokes that combine the Ctrl or End key with an arrow key listed in Table 1-1 are among the most helpful for moving quickly from one edge to the other in large tables of cell entries or for moving from table to table in a section of a worksheet with many blocks of cells.

When you use Ctrl and an arrow key to move from edge to edge in a table or between tables in a worksheet, you hold down Ctrl while you press one of the four arrow keys (indicated by the + symbol in keystrokes, such as Ctrl+→).

When you use End and an arrow-key alternative, you must press and then release the End key *before* you press the arrow key (indicated by the comma in keystrokes, such as End, →). Pressing and releasing the End key causes the End Mode indicator to appear on the status bar. This is your sign that Excel is ready for you to press one of the four arrow keys.

Because you can keep the Ctrl key depressed while you press the different arrow keys that you need to use, the Ctrl-plus-arrow-key method provides a more fluid method for navigating blocks of cells than the End-then-arrow-key method.



You can use the Scroll Lock key to “freeze” the position of the cell pointer in the worksheet so that you can scroll new areas of the worksheet in view with keystrokes, such as PgUp (Page Up) and PgDn (Page Down), without changing the cell pointer’s original position. (In essence, making these keystrokes work in the same manner as the scroll bars.)

After engaging Scroll Lock, when you scroll the worksheet with the keyboard, Excel does not select a new cell while it brings a new section of the worksheet into view. To “unfreeze” the cell pointer when scrolling the worksheet via the keyboard, you just press the Scroll Lock key again.

Tips on using the scroll bars

To understand how scrolling works in Excel, imagine its humongous worksheet as a papyrus scroll attached to rollers on the left and right. To bring into view a section of papyrus hidden on the right, you crank the left roller until the section with the cells that you want to see appears. Likewise, to scroll into view a worksheet section hidden on the left, you crank the right roller until the section of cells appears.

You can use the horizontal scroll bar at the bottom of the Worksheet area to scroll back and forth through the columns of a worksheet and the vertical scroll bar to scroll up and down through its rows. To scroll a column or a row at a time in a particular direction, click the appropriate scroll arrow at the ends of the scroll bar. To jump immediately back to the originally displayed area of the worksheet after scrolling through single columns or rows in this fashion, simply click the area in the scroll bar that now appears in front of or after the scroll bar.



You can resize the horizontal scroll bar making it wider or narrower by dragging the button that appears to the immediate left of its left scroll arrow. Just keep in mind when working in a workbook that contains a whole bunch of worksheets that widening the horizontal scroll bar can hide the display of the workbook’s later sheet tabs.



To scroll very quickly through columns or rows of the worksheet, hold down the Shift key and then drag the scroll button in the appropriate direction within the scroll bar until the columns or rows that you want to see appear on the screen in the Worksheet area. When you hold down the Shift key while you scroll, the scroll button within the scroll bar becomes skinny and a ScreenTip appears next to the scroll bar, keeping you informed of the letter(s) of the columns or the numbers of the rows that you're whizzing through.

If your mouse has a wheel, you can use it to scroll directly through the columns and rows of the worksheet without using the horizontal or vertical scroll bars. Simply position the white cross mouse pointer in the center of the Worksheet area and then hold down the wheel button of the mouse. When the mouse pointer changes to a four-pointed arrow with a black dot in its center, drag the mouse pointer in the appropriate direction (left and right to scroll through columns or up and down to scroll through rows) until the desired column or row comes into view in the Worksheet area.

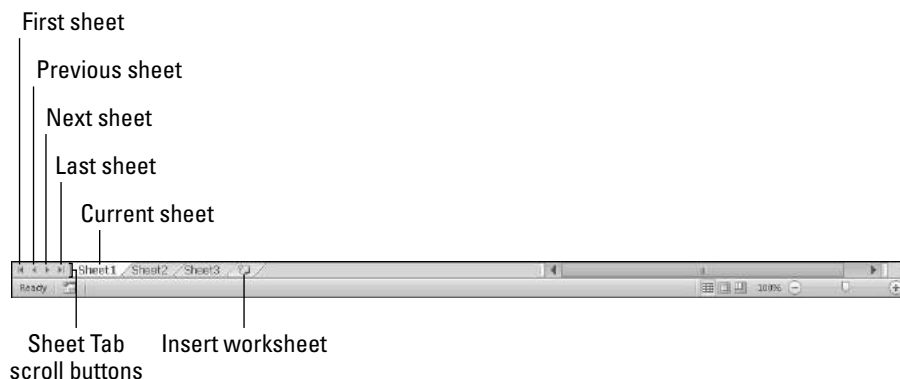


The only disadvantage to using the scroll bars to move around is that the scroll bars bring only new sections of the worksheet into view — they don't actually change the position of the cell cursor. If you want to start making entries in the cells in a new area of the worksheet, you still have to remember to select the cell (by clicking it) or the group of cells (by dragging through them) where you want the data to appear before you begin entering the data.

Surfing the sheets in a workbook

Each new workbook you open in Excel 2010 contains three blank worksheets, each with its own 16,384 columns and 1,048,576 rows (giving you a truly staggering 51,539,607,552 blank cells!). But, that's not all. If ever you need more worksheets in your workbook, you can add them simply by clicking the Insert Worksheet button that appears to the immediate right of the last sheet tab (see Figure 1-7) or by pressing Shift+F11.

Figure 1-7: The Sheet Tab scroll buttons, sheet tabs, and Insert Worksheet button enable you to activate your worksheets and add to them.



One reason for adding extra sheets to a workbook

You may wonder why anyone would ever need more than three worksheets given just how many cells each individual sheet contains. The truth is that it's all about how you choose to structure a particular spreadsheet rather than running out of places to put the data. For example, suppose that you need to create a workbook that contains budgets for all the various departments in your corporation, you may decide to devote an individual worksheet

to each department (with the actual budget spreadsheet tables laid out in the same manner on each sheet) rather than placing all the tables in different sections of the same sheet. Using this kind of one-sheet-per-budget layout makes it much easier for you to find each budget, print each one as a separate page of a report, and, if ever necessary, to consolidate the data in a separate summary worksheet.

On the left side of the bottom of the Worksheet area, the Sheet Tab scroll buttons appear followed by the actual tabs for the worksheets in your workbook and the Insert Worksheet button. To activate a worksheet for editing, you select it by clicking its sheet tab. Excel lets you know what sheet is active by displaying the sheet name in boldface type and making its tab appear on top of the others.



Don't forget the Ctrl+Page Down and Ctrl+Page Up shortcut keys for selecting the next and previous sheet, respectively, in your workbook.

If your workbook contains too many sheets for all the tabs to display at the bottom of the Worksheet area, use the Sheet Tab scroll buttons to bring new tabs into view (so that you can then click them to activate them). You click the Next Sheet button to scroll the next hidden sheet tab into view or the Last Sheet button to scroll the last group of completely or partially hidden tabs into view.

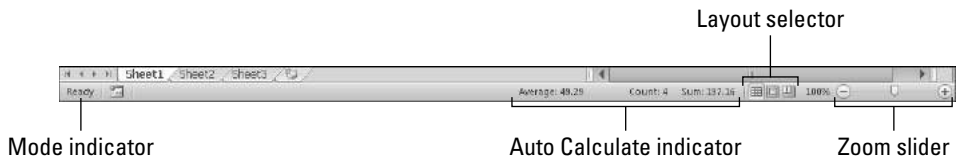
Showing off the Status bar

The Status bar is the last component at the very bottom of the Excel program window (see Figure 1-8). The Status bar contains the following:

- ✓ **Mode indicator** that shows the current state of the Excel program (Ready, Edit, and so on) as well as any special keys that are engaged (Caps Lock, Num Lock, and Scroll Lock).
- ✓ **AutoCalculate indicator** that displays the average and sum of all the numerical entries in the current cell selection along with the count of every cell in the selection.

- ✓ **Layout selector** that enables you to select between three layouts for the Worksheet area: Normal, the default view that shows only the worksheet cells with the column and row headings; Page Layout View that adds rulers, page margins, and shows page breaks for the worksheet; and Page Break Preview that enables you to adjust the paging of a report. (See Chapter 5 for details.)
- ✓ **Zoom slider** that enables you to zoom in and out on the cells in the Worksheet area by dragging the slider to the right or left, respectively.

Figure 1-8:
The Status bar displays the program's current standing and enables you to select new worksheet views.



The Num Lock indicator tells you that you can use the numbers on the numeric keypad for entering values in the worksheet. This keypad will most often be separate from the regular keyboard (on the right side if you're using a separate keyboard) and embedded in keys on the right side of the keyboard on almost all laptop computers where the keyboard is built in to the computer.

Launching and Quitting Excel

Excel 2010 runs under both the older Windows XP operating system and the newer Vista and Windows 7 operating systems. Because of changes made to the Start menu in Windows Vista and Windows 7, the procedure for starting Excel from these versions of Windows is a bit different from Windows XP.

Starting Excel from the Start menu

You can use the Start Search box at the bottom of the Windows Vista Start menu or the Search Programs and Files search box on the Windows 7

Start menu to locate Excel on your computer and launch the program in no time at all:

- 1. Click the Start button on the Windows taskbar to open the Windows Start menu.**
- 2. Click the Start menu's search text box and type the letters `exc` to have Windows locate Microsoft Office Excel 2010 on your computer.**
- 3. Click the Microsoft Excel 2010 option that now appears in the left Programs column on the Start menu.**

If you have more time on your hands, you can also launch Excel from the Windows Start menu by going through the rigmarole of clicking Start→All Programs→Microsoft Office→Microsoft Excel 2010.

Starting Excel from the Windows XP Start menu

When starting Excel 2010 from the Windows XP Start menu, you follow these simple steps:

- 1. Click the Start button on the Windows taskbar to open the Windows Start menu.**
- 2. With the mouse, highlight All Programs on the Start menu and then Microsoft Office on the Start continuation menu before clicking the Microsoft Excel 2010 option on the Microsoft Office continuation menu.**

Pinning a Microsoft Excel 2010 option on your Windows Start menu

If you use Excel all the time, you may want to make its program option a permanent part of the Windows Start menu. To do this, you pin the program option to the Start menu (and the steps for doing this are the same in Windows XP as they are in Windows Vista and Windows 7):

- 1. Click the Windows Start button and then highlight the All Programs option on the Start menu.**

Windows XP opens a continuation menu from its Start menu and Windows Vista and Windows 7 display a new menu of program options on their Start menus.

2. **Highlight the Microsoft Office option on the Windows XP continuation menu or click the Microsoft Office option on the Windows Vista/7 Start menu.**

Windows XP displays a continuation menu with a list of all the Office 2010 programs installed on your computer. Windows Vista and Windows 7 display a submenu listing the Office 2010 programs.

3. **Right-click Microsoft Excel 2010 on the Windows continuation or submenu to open its shortcut menu.**
4. **Click Pin to Start Menu on the shortcut menu.**



After pinning Excel in this manner, the Microsoft Excel 2010 option always appears in the upper section of the left-hand column of the Windows Start menu and you can then launch Excel simply by clicking the Windows Start button and then clicking this menu option.



After you pin the Microsoft Excel 2010 option on to the Windows 7 Start menu, whenever you highlight this menu item, Windows 7 automatically expands the Start menu to display a list of your recently opened Excel workbook files. You can then open one of these files for further editing at the same time you launch the Excel 2010 program by clicking its filename on the Start menu.

Adding a Microsoft Excel 2010 shortcut to your Windows desktop

Some people prefer having the Excel program icon appear on the Windows desktop so that they can launch the program from the desktop by double-clicking this program icon. To create a Microsoft Excel 2010 program shortcut for your Windows desktop, you follow these steps:

1. **Click the Windows Start button and then highlight the All Programs option on the Start menu.**

Windows XP opens a continuation menu from its Start menu and Windows Vista and Windows 7 display a new menu of program options on their Start menus.

2. **Highlight the Microsoft Office option on the Windows XP continuation menu or click the Microsoft Office option on the Windows Vista/Windows 7 Start menu.**

Windows XP displays a continuation menu with a list of all the Office 2010 programs installed on your computer. Windows Vista and Windows 7 display a submenu listing the Office 2010 programs.

3. **Right-click Microsoft Excel 2010 on the Windows continuation or sub-menu to open its shortcut menu.**
4. **Highlight the Send To option on this menu and then click Desktop (Create Shortcut) on the continuation shortcut menu.**

Windows adds a Microsoft Excel 2010 shortcut icon to your Windows desktop that launches the program when you double-click it or right-click it and then click the Open option.

Adding Excel to the Windows Quick Launch toolbar

If you want to be able to launch Excel 2010 by clicking a single button, drag the Excel icon for your Windows Vista or Windows XP desktop shortcut to the Quick Launch toolbar to the immediate right of the Start button at the beginning of the Windows taskbar. When you position the icon on this toolbar, Windows indicates where the new Excel button will appear by drawing a black, vertical I-beam in front of or between the existing buttons on this bar. As soon as you release the mouse button, Windows adds an Excel 2010 button to the Quick Launch toolbar that enables you to launch the program by a single click of its icon.

Pinning an Excel icon to the Windows 7 taskbar

If your computer is running Windows 7, you can add a Microsoft Excel 2010 icon to the taskbar in addition to the standard Internet Explorer, Windows Explorer, and Windows Media Player buttons.

All you do is drag and drop the Microsoft Excel 2010 icon that either you pinned to the Windows Start menu or you added as a shortcut to the Windows desktop into its desired position on the Windows 7 taskbar. (See “Pinning a Microsoft Excel 2010 option on your Windows Start menu” and “Adding a Microsoft Excel 2010 shortcut to your Windows desktop” earlier in this chapter for details.)



After pinning a Microsoft Excel 2010 icon to the Windows 7 taskbar, the button appears on the Windows taskbar each time you start your computer, and you can launch the Excel program simply by single clicking its icon.

Exiting Excel

When you're ready to call it a day and quit Excel, you have several choices for shutting down the program:

- ✓ Choose File⇨Exit.
- ✓ Press Alt+FX or Alt+F4.
- ✓ Click the Close button (the X) in the upper-right corner of the Excel program window.

If you try to exit Excel after working on a workbook and you haven't saved your latest changes, the program displays an alert box querying whether you want to save your changes. To save your changes before exiting, click the Save command button. (For detailed information on saving documents, see Chapter 2.) If you've just been playing around in the worksheet and don't want to save your changes, you can abandon the document by clicking the Don't Save button.

Help Is on the Way

You can get online help with Excel 2010 anytime that you need it while using the program. Simply click the Help button (the button with the question mark icon to the immediate right of the Minimize the Ribbon button on the right side of the program window opposite the Ribbon's tabs) or press F1 to open a separate Excel Help window. (See Figure 1-9.)

When the Excel Help window opens, Excel attempts to use your Internet connection to update its topics. The opening Help window contains links that you can click to get information on what's new in the program.

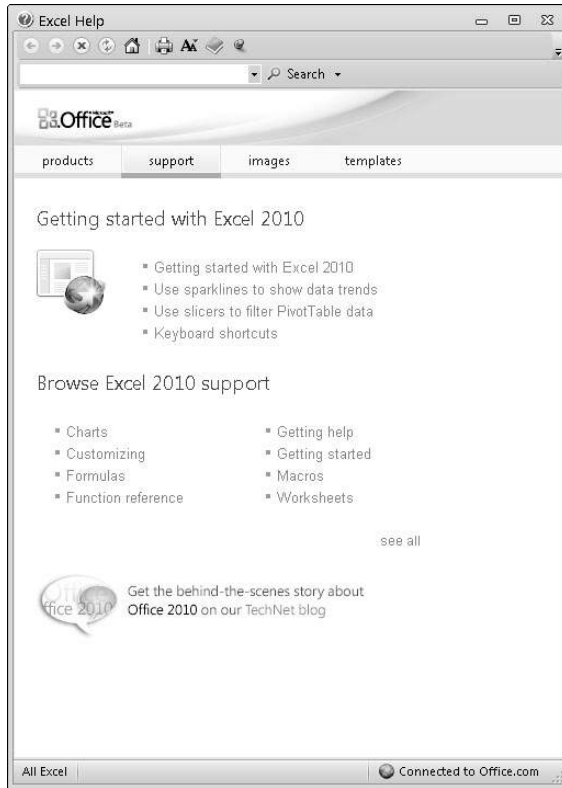
To get help with a particular command or function, use the Search text box at the top of the Excel Help window. Type keywords or a phrase describing your topic (such as "print preview" or "printing worksheets") in this text box and then press Enter or click the Search button. The Excel Help window then presents a list of links to related help topics that you can click to display the information.



To print the help topic displayed in the Excel Help window, click the Print button (with the printer icon) on its toolbar. Excel then opens a Print dialog box where you can select the printer and options to use in printing the information.

To display a table of contents with all the main categories and subtopics arranged hierarchically, click the Show Table of Contents button (with the book icon) on the toolbar.

Figure 1-9:
The Excel
Help
window
automatically
connects
you to the
Internet
when you
open it.



Migrating to Excel 2010 from Earlier Versions Using Pull-down Menus

If you're a brand new Excel user or have had some experience with Excel 2007, you're going to take to Excel 2010's Ribbon User Interface like a duck to water. However, if you're coming to Excel 2010 as a dedicated user of earlier Excel versions (Excel 97 all the way through Excel 2003), the first time you launch Excel 2010 and take a gander at the Ribbon, you're probably going to feel more like someone just threw you into the deep end of the pool without a life preserver.



Don't panic! Simply use this section of the chapter as your Excel 2010 life preserver. It's intended to get you oriented, keep your head above water, and have you swimming with the new interface in no time at all. Just give me five minutes of your precious time and I promise I'll have you up and running with Excel 2010 and maybe even smiling again. Now, take a deep breath, and here we go. . . .



First, the bad news: There is *no* Classic mode in Excel 2010 that will magically turn that fat, screen real estate–stealing Ribbon back into those sleek, tried and true pull-down menus (thanks Microsoft, I needed that!). After the wonderful designers and engineers at Microsoft got through dumping all the pull-down menus and toolbars that you worked so diligently to master and on which you relied every Excel workday of your life, there was just nothing left for them to hang a Classic mode onto.

Now, for the good news: You really don't need a Classic mode — you just need to find out where those scoundrel engineers went and put all the stuff you used to do so effortlessly in versions of Excel before the Ribbon User Interface. After all, you already know what most of those pull-down menu items and toolbar buttons do; all you have to do is locate them.

Cutting the Ribbon down to size

Want to get that busy Ribbon out of your face? At this point, it's just taking up valuable space and probably making you crazy. So, please double-click any one of the tabs or press Ctrl+F1 right now to cut the Ribbon display down to only its tabs. Single-clicking a tab then temporarily redisplay the Ribbon until you select one of its command buttons, whereas pressing Ctrl+F1 a second time redisplay the Ribbon and keeps it open in all its glory.

When only the tabs — Home through View — are showing at the top of the Excel program window, you should feel a whole lot more comfortable with the screen. The Excel 2010 screen is then as clean and uncluttered, if not more, as the earlier version of Excel that you were using with only the Quick Access toolbar, Ribbon tabs, and Formula bar displayed above the Worksheet area.

Now, you're probably wondering where those Microsoft engineers moved the most important and commonly used pull-down menu commands. Table 1-2 shows the Excel 2010 equivalents for the menu commands you probably used most often in doing your work in the earlier version of Excel.



When a particular command is assigned to one of the tabs on the Ribbon, Table 1-2 lists only the tab and command button name without naming the group because the group name plays no part in selecting the command. For example, the table lists the View⇨Header and Footer command as Insert⇨Header & Footer without regard to the fact that the Header & Footer button is part of the Text group on the Insert tab.

Table 1-2 Excel 2010 Equivalents for Common Pull-down Menu Commands in Excel 2003

<i>Excel 2003 Command</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
File Menu			
File⇨New	File⇨New	Ctrl+N	Alt+FN
File⇨Open	File⇨Open	Ctrl+O	Alt+FO
File⇨Save	File⇨Save or Save button on the Quick Access toolbar	Ctrl+S	Alt+FS
File⇨Save As	File⇨Save As	F12	Alt+FA
File⇨Print	File⇨Print	Ctrl+P	Alt+FP
File⇨Send To⇨Mail Recipient	File⇨Share⇨Send Using Email		Alt+FHE
File⇨Send To⇨Recipient Using Internet Fax Service	File⇨Share⇨Send as Internet Fax		Alt+FHIF
File⇨Close	File⇨Close	Ctrl+W	Alt+FC
Edit Menu			
Edit⇨Office Clipboard	Home⇨Clipboard group's dialog box launcher		Alt+HFO
Edit⇨Clear⇨All	Home⇨Clear (eraser icon)⇨Clear All		Alt+HEA
Edit⇨Clear⇨Formats	Home⇨Clear (eraser icon)⇨Clear Formats		Alt+HEF
Edit⇨Clear⇨Contents	Home⇨Clear (eraser icon)⇨Clear Contents	Delete key	Alt+HEC
Edit⇨Clear⇨Comments	Home⇨Clear (eraser icon)⇨Clear Comments		Alt+HEM
Edit⇨Delete	Home⇨Delete		Alt+HD
Edit⇨Move or Copy Sheet	Home⇨Format⇨Move or Copy Sheet		Alt+HOM
Edit⇨Find	Home⇨Find & Select⇨Find	Ctrl+F	Alt+HFDF
Edit⇨Replace	Home⇨Find & Select⇨Replace	Ctrl+H	Alt+HFDR

(continued)

Table 1-2 (continued)

<i>Excel 2003 Command</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
View Menu			
View⇨Header and Footer	Insert⇨Header & Footer		Alt+NH
View⇨Full Screen	View⇨Full Screen		Alt+WE
Insert Menu			
Insert⇨Cells	Home⇨Insert⇨ Insert Cells		Alt+HII
Insert⇨Rows	Home⇨Insert⇨ Insert Sheet Rows		Alt+HIR
Insert⇨Columns	Home⇨Insert⇨ Insert Sheet Columns		Alt+HIC
Insert⇨Worksheets	Home⇨Insert⇨Insert Sheet		Alt+HIS
Insert⇨Symbol	Insert⇨Symbol		Alt+NU
Insert⇨Page Break	Page Layout⇨Breaks⇨ Insert Page Break		Alt+PBI
Insert⇨Name⇨ Define	Formulas⇨Define Name⇨Define Name		Alt+MMD
Insert⇨Name⇨ Paste	Formulas⇨Use in Formula		Alt+MS
Insert⇨Name⇨ Create	Formulas⇨Create from Selection		Alt+MC
Insert⇨Name⇨Label	Formulas⇨Name Manager		Alt+MN
Insert⇨Comment	Review⇨New Comment		Alt+RC
Insert⇨Picture	Insert⇨Picture		Alt+NP
Insert⇨Hyperlink	Insert⇨Hyperlink	Ctrl+K	Alt+NI
Format Menu			
Format⇨Cells	Home⇨Format⇨ Format Cells	Ctrl+1	Alt+HOE
Format⇨Row⇨ Height	Home⇨Format⇨ Row Height		Alt+HOH
Format⇨Row⇨ AutoFit	Home⇨Format⇨ AutoFit Row Height		Alt+HOA

<i>Excel 2003 Command</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
Format⇨Row⇨Hide/Unhide	Home⇨Format⇨Hide & Unhide⇨Hide Rows/Unhide Rows		Alt+HOUR/ Alt+HOOU
Format⇨Column⇨Width	Home⇨Format⇨Column Width		Alt+HOW
Format⇨Column⇨Hide/Unhide	Home⇨Format⇨Hide & Unhide⇨Hide Columns/Unhide Columns		Alt+HOUC/ Alt+HOUL
Format⇨Column⇨Standard Width	Home⇨Format⇨Default Width		Alt+HOD
Format⇨Sheet⇨Rename	Home⇨Format⇨Rename Sheet		Alt+HOR
Format⇨Sheet⇨Hide/Unhide	Home⇨Format⇨Hide & Unhide⇨Hide Sheet/Unhide Sheet		Alt+HOUS/ Alt+HOUH
Format⇨Sheet⇨Background	Page Layout⇨Background		Alt+PG
Format⇨Sheet⇨Tab Color	Home⇨Format⇨Tab Color		Alt+HOT
Format⇨AutoFormat	Home⇨Format as Table		Alt+HT
Format⇨Conditional Formatting	Home⇨Conditional Formatting		Alt+HL
Format⇨Style	Home⇨Cell Styles		Alt+HJ
Tools Menu			
Tools⇨Spelling	Review⇨Spelling	F7	Alt+RS
Tools⇨Research	Review⇨Research		Alt+RR
Tools⇨Error Checking	Formulas⇨Error Checking		Alt+MK
Tools⇨Speech⇨Show Text to Speech Toolbar	<i>Available only as custom Speak Cells, Speak Cells - Stop Speaking Cells, Speak Cells by Columns, Speak Cells by Rows, and Speak Cells on Enter buttons added to Quick Access toolbar</i>		

(continued)

Table 1-2 (continued)

<i>Excel 2003 Command</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
Tools⇨Track Changes	Review⇨Track Changes		Alt+RG
Tools⇨Protection⇨Protect Sheet	Review⇨Protect Sheet		Alt+RPS
Tools⇨Protection⇨Allow Users to Edit Ranges	Review⇨Allow Users to Edit Ranges		Alt+RU
Tools⇨Protection⇨Protect Workbook	Review⇨Protect Workbook		Alt+RPW
Tools⇨Protection⇨Protect and Share Workbook	Review⇨Protect and Share Workbook		Alt+RO
Tools⇨Macro	View⇨Macros	Alt+F8	Alt+WMV
Tools⇨Add-Ins	File⇨Options⇨Add-Ins		Alt+FIAA and then Alt+G
Tools⇨AutoCorrect Options	File⇨Options⇨Proofing⇨AutoCorrect Options		Alt+FIP and then Alt+A
Tools⇨Options	File⇨Options		Alt+FI
Data Menu			
Data⇨Sort	Home⇨Sort & Filter⇨Custom Sort		Alt+HSU
Data⇨Filter⇨AutoFilter	Data⇨Filter		Alt+AT
Data⇨Filter⇨Advanced Filter	Data⇨Advanced		Alt+AQ
Data⇨Form	<i>Available only as a custom Form button added to Quick Access toolbar</i>		
Data⇨Subtotals	Data⇨Subtotal		Alt+AB
Data⇨Validation	Data⇨Data Validation⇨Data Validation		Alt+AVV
Data⇨Table	Data⇨What-If Analysis⇨Data Table		Alt+AWT

<i>Excel 2003 Command</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
Data↔Text to Columns	Data↔Text to Columns		Alt+AE
Data↔Consolidate	Data↔Consolidate		Alt+AN
Data↔Group and Outline	Data↔Group/Ungroup		Alt+AG/ Alt+AU
Data↔PivotTable and PivotChart Report	Insert↔PivotTable↔PivotTable/PivotChart		Alt+NVT/ Alt+NVC
Data↔Import External Data	Data↔From Other Sources		Alt+AFO
Window Menu			
Window↔New Window	View↔New Window		Alt+WN
Window↔Arrange	View↔Arrange All		Alt+WA
Window↔Compare Side by Side	View↔View Side by Side (two-page icon in Window group)		Alt+WB
Window↔Hide, Unhide	View↔Hide/Unhide		Alt+WH/ Alt+WU
Window↔Split	View↔Split		Alt+WS
Window↔Freeze Panes	View↔Freeze Panes		Alt+WF

For the most part, the pull-down menu commands listed in Table 1-2 are logically located. The ones that take the most getting used to are the Header & Footer and PivotTable/Chart commands that are located on the Insert tab rather than the View tab and Data tab as might be expected given they inhabited, respectively, the View and Data pull-down menus in earlier Excel versions. Additionally, the worksheet background command ended up all by its lonesome on the Page Layout tab rather than going to the Home tab with all its fellow formatting commands.

Finding the Standard toolbar buttons equivalents

If you're like me, you came to rely heavily on the buttons of the Standard toolbar in doing all sorts of everyday tasks in earlier versions of Excel. Table

1-3 shows you the Excel 2010 equivalents for the buttons on the Standard toolbar in Excel 2003. As you can see from this table, most of the Standard toolbar buttons are regulated to one of these places in Excel 2010:

- ✓ **Backstage View** activated by clicking the File tab or pressing Alt+F (New, Open, Save, Print)
- ✓ **Quick Access toolbar** (Save, Undo, and Redo)
- ✓ **Home tab** in the Clipboard group (Cut, Copy, Paste, and Format Painter) and Editing group (AutoSum, Sort Ascending, and Sort Descending)

Table 1-3 Excel 2010 Equivalents for the Standard Toolbar Buttons in Excel 2003

<i>Toolbar Button</i>	<i>Excel 2010 Equivalent</i>	<i>Common Shortcut Keys</i>	<i>Excel 2010 Shortcut Keys</i>
New	File→New	Ctrl+N	Alt+FN
Open	File→Open	Ctrl+O	Alt+FO
Save	File→Save or Save button on Quick Access toolbar	Ctrl+S	Alt+FS
Permission	<i>Available only as a custom Permission button added to Quick Access toolbar</i>		
E-mail	File→Share→Send Using E-mail		Alt+FHE
Print	Quick Print button on Quick Access toolbar		
Print Preview	File→Print		Alt+FP
Spelling	Review→Spelling	F7	Alt+RS
Research	Review→Research		Alt+RR
Cut	Home→Cut (scissors icon in Clipboard group)	Ctrl+X	Alt+HX
Copy	Home→Copy (double-sheet icon in Clipboard group)	Ctrl+C	Alt+HC
Paste	Home→Paste	Ctrl+V	Alt+HV

Toolbar Button	Excel 2010 Equivalent	Common Shortcut Keys	Excel 2010 Shortcut Keys
Format Painter	Home⇨Format Painter (brush icon in Clipboard group)		Alt+HFP
Undo	Undo button on Quick Access toolbar	Ctrl+Z	
Redo	Redo button on Quick Access toolbar	Ctrl+Y	
Insert Ink Annotations	Review⇨Start Inking (appears only on Tablet PCs or computers with a digital ink tablet)		Alt+RK
Insert Hyperlink	Insert⇨Hyperlink	Ctrl+K	Alt+NI
AutoSum	Home⇨AutoSum (Σ - Sigma icon)		Alt+HU
Sort Ascending	Home⇨Sort & Filter⇨Sort A to Z		Alt+HSS
Sort Descending	Home⇨Sort & Filter⇨Sort Z to A		Alt+HSO
Chart Wizard	<i>Not available except as specific chart type command buttons in the Charts group on the Insert tab</i>		
Drawing	<i>Not available except as command buttons in the Illustrations and Text groups on the Insert tab, and as custom buttons added to Quick Access toolbar</i>		
Zoom	View⇨Zoom		Alt+WQ
Microsoft Excel Help	Microsoft Office Excel Help button to the right of the Ribbon tabs	F1	



Because Excel 2010 supports only a single toolbar (the Quick Access toolbar), the Drawing toolbar disappears completely from Excel 2010, thus the Drawing button on the Standard toolbar has no equivalent. Most of its main features, including clip art, inserting graphics files, and creating diagrams and WordArt are now on the Insert tab. Also, Excel 2010 doesn't have an equivalent to the Chart Wizard button on the Standard toolbar because you can create a chart in a split-second by clicking the Column, Line, Pie, Bar, Area, Scatter, or Other Charts command buttons on the Insert tab (see Chapter 10).

Finding the Formatting toolbar buttons equivalents

Finding the Excel 2010 equivalents for the buttons on the Formatting toolbar in earlier versions of Excel couldn't be easier: Every one of the buttons on the Formatting toolbar is displayed prominently on the Home tab of the Ribbon. They're all easy to identify because they use the same icons as before and are located in the Font, Alignment, or Number group on the Home tab (refer to Figure 1-3).

In addition to the Font, Font Size, Bold, Italic, Underline, Borders, Fill Color, and Font Color buttons from the Formatting toolbar, the Font group also contains the following two buttons:

- ✓ **Increase Font Size** button that bumps up the current font size a point
- ✓ **Decrease Font Size** button that reduces the current font size by a point

In addition to the Left Align, Center, Right Align, Decrease Indent, Increase Indent, and Merge & Center buttons, the Alignment group also contains the following buttons:

- ✓ **Top Align** button that vertically aligns the data entered into the current cell selection with the top edge of the cell
- ✓ **Middle Align** button that vertically centers the data entered into the current cell selection
- ✓ **Bottom Align** button that aligns the data entered in the current cell selection with the bottom edge of the cell
- ✓ **Orientation** button that opens a pop-menu of orientation options that enable you to change the direction of the text entered into the current cell selection (by angling it up or down, converting it to vertical text, or rotating it up or down) and open the Alignment tab of the Format Cells dialog box
- ✓ **Wrap Text** button that applies wrap text to the current cell selection so that Excel expands the row heights as needed to fit all its text within the current column widths

In addition to the Percent Style, Comma Style, Increase Decimal, and Decrease Decimal buttons from the Formatting toolbar, the Numbers group contains the following buttons:

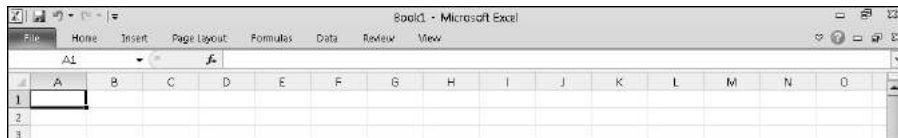
- ✓ **Accounting Number Format** button that enables you to select among several different currency formats from U.S. dollars to Swiss Francs, as well as to open the Number tab of the Format Cells dialog box with the Accounting number format selected
- ✓ **Number Format** button that opens a pop-up menu of different number options from General through Text, as well as opens the Number tab in the Format Cells dialog box when you select its More Number Formats option

Putting the Excel Quick Access toolbar to good use during the transition

Figure 1-10 shows you the Excel 2010 program window with the Ribbon minimized and a completely customized Quick Access toolbar moved down so that it appears under the tabs and above the Formula bar. This completely custom version of the Quick Access toolbar should seem very familiar to you: It contains every button from the Standard and Formatting toolbars in Excel 2003 with the exception of the Permission, Drawing, Zoom, and Help buttons. The Permission button is so esoteric and seldom used that I didn't bother to add it. The Drawing button has no equivalent in Excel 2010. And neither the Zoom button nor the Help button is really needed because the Zoom slider that enables you to quickly select a new screen magnification percentage always displays in the lower-right corner of the Excel 2010 Status bar and the Help button always displays on the right side of the bar containing the Ribbon tabs.

Figure 1-10:

After minimizing the Ribbon and adding most of the buttons from the Standard and Formatting toolbars to the Quick Access toolbar.





To customize your Quick Access toolbar so that it matches the one shown in Figure 1-10 with every button from the Standard and Formatting toolbars except the Permission, Drawing, Zoom, and Help buttons, follow these steps:

- 1. Click the Customize Quick Access Toolbar button at the end of the Quick Access toolbar and then click the Show Below the Ribbon option.**

When filling the Quick Access toolbar with buttons, you need to place the bar beneath the Ribbon so that it won't crowd the name of the current workbook file.

- 2. Click the Customize Quick Access Toolbar button again and this time click the More Commands option.**

Excel opens the Excel Options dialog box with the Quick Access Toolbar tab selected. The Customize Quick Access Toolbar list box on the right side of this dialog box shows all three of the default buttons in the order in which they now appear on the toolbar.

- 3. Click the New option in the Popular Commands list followed by the Add button.**

Excel adds the New command button at the end of the toolbar indicated by the appearance of the New button at the bottom of the list in the Customize Quick Access Toolbar list box on the right.

- 4. Click the Move Up button (with the triangle pointing upward) three times to move the New button to the top of the Customize Quick Access Toolbar list box and the first position on the Quick Access toolbar.**

The New button is now in front of the Save button on the toolbar.

- 5. Click the Open option in the Popular Commands list box on the left and then click the Add button.**

Excel inserts the Open button in the Customize Quick Access Toolbar list box between the New and the Save buttons, which is exactly where it appears on the Standard toolbar.

- 6. Click the Save button in the Customize Quick Access Toolbar list box on the right to select this button. Then, click the Quick Print option in the Popular Commands list box on the left and click the Add button.**

Excel inserts the Quick Print button after the Save button.

- 7. Click the Print Preview button near the bottom of the Popular Commands list box and then click the Add button.**

Excel inserts the Print Preview button after the Quick Print button in the Customize Quick Access Toolbar list box.

Now, you need to add the Spelling and Research buttons. They are located on the Review tab in Excel 2010. Before you can add the buttons to the Quick Access toolbar, you need to replace Popular Commands

with Review Tab by selecting this option on the Choose Commands From drop-down list.

- 8. Click the Choose Commands From drop-down button and then click Review Tab in the drop-down list.**

Excel now displays all the command buttons on the Review tab of the Ribbon in the list box below.

- 9. Add the Spelling and Research buttons from the Review Tab list box to the Customize Quick Access Toolbar list box and position them so that they appear one after the other following the Print Preview button.**

Next, you need to add the Cut, Copy, Paste, and Format Painter buttons to the Quick Access toolbar. These command buttons are on the Home tab.

- 10. Click the Home Tab option in the Choose Commands From drop-down list and then add the Cut, Copy, and Paste buttons to the Customize Quick Access Toolbar in this order in front of the Undo button.**

Note when adding the Paste button that Choose Commands From displays two Paste buttons. The first is the regular Paste button that was on the Standard toolbar. The second is a Paste button with a drop-down button that, when clicked, opens a drop-down menu with all the special Paste options. You can add either one, although the second Paste button with the drop-down menu is much more versatile.

- 11. Click the Format Painter option in the Home Tab list box and then click the Add button.**

Excel adds the Format Painter button after the Paste button in the Customize Quick Access Toolbar list box on the right.

- 12. Click the Redo button in the Customize Quick Access Toolbar list box to select its icon, click Insert Tab on the Choose Commands From drop-down list, and then add the Insert Hyperlink button to the Quick Access toolbar.**

- 13. Add the remaining Standard toolbar buttons — AutoSum, Sort Ascending, Sort Descending, and Create Chart — to the Quick Access toolbar.**

The AutoSum, Sort Ascending, and Sort Descending buttons are available in the Home Tab list box and the Create Chart button (the closest thing to the Chart Wizard in Excel 2010) is on the Insert Tab list box.

- 14. Add the buttons on the Formatting toolbar to the Quick Access toolbar in the order in which they appear.**

The Formatting toolbar contains these tools all found on the Home tab:

- Font
- Font Size

- Bold
- Italic
- Underline
- Align Text Left
- Center
- Align Text Right
- Merge & Center
- Accounting Number Format (corresponding to the Currency Style button)
- Percent Style
- Comma Style
- Increase Decimal
- Decrease Decimal
- Decrease Indent
- Increase Indent
- Borders
- Fill Color
- Font Color

15. Click the OK button to close the Excel Options dialog box and return to the Excel program window.

Your Quick Access toolbar should now have the same buttons as the one shown in Figure 1-10.



After adding all the buttons on the Standard and the Formatting toolbars (save the Permission button that almost nobody uses, the Drawing button that has no equivalent in Excel 2010, and the Zoom and Help buttons that are always available in the program window), the Quick Access toolbar fills the entire width of the screen on many monitors. If you add extra buttons that can't fit on the single row above the Formula bar, Excel automatically adds a More Controls button to the end of the Quick Access toolbar. You then click the More Controls button to display a pop-up menu containing the unseen buttons of the toolbar.



To add vertical separators to divide the buttons into groups, as in the original Standard and Formatting toolbars and shown in Figure 1-10, click the <Separator> option located at the top of each Choose Commands From list box followed by the Add button.

Getting good to go with Excel 2010

The version of the Excel 2010 program window shown in Figure 1-10 with the Ribbon minimized to just tabs and the Quick Access toolbar displayed above the Formula bar with all but a few of the buttons from the Standard and Formatting toolbars is as close as I can get you to any sort of Excel 2003 Classic mode.

Combine this simplified screen layout with the common shortcut keys (see Table 1-2) that you already know and you should be pretty much good to go with Excel 2010. Of course, the Ribbon can't always stay reduced to just its tabs. As you find out while you explore the features covered in the remaining chapters, there'll be times when you need the tools (especially in the form of those fantastic galleries) that a particular tab has to offer.

The only other issues that should be of any concern to you right now are the new Excel 2010 file formats and running all those Excel macros on which you've come to rely.

Dealing with the new Excel file formats

Yes, it's true that Excel 2010 naturally saves its workbooks in the XLSX file format introduced in Excel 2007 (a format that Microsoft insists is a truly "open" XML file format and not at all proprietary as were all the previous Excel file formats).

Fortunately, Excel 2010 has no trouble opening any workbook files saved in the good old XLS file format used by versions 97 through 2003. More importantly, the program automatically saves all editing changes you make to these files in this original file format.

Therefore, you don't have a worry in the world when it comes to making simple edits to existing spreadsheets with Excel 2010. Simply, open the workbook file and then make all the necessary changes. When you finish, click the Save button on the Quick Access toolbar to save your changes in the good old XLS file format that everybody in the office who is still using a previous version of Excel can still open, edit, and print. Excel also warns you should you ever add a new 2007 or 2010 element to the existing workbook that isn't supported by earlier versions.

The challenge comes when you need to use Excel 2010 to create a brand new spreadsheet. The program automatically wants to save all new workbooks in its fancy new XLSX file format (see Chapter 2 for a complete rundown on this new workbook file format and the pros and cons of using it). If you don't want to save your workbook in this format, you need to remember to click the Save as Type drop-down button in the Save As dialog box and then click the Excel 97-2003 Workbook (*.xls) option on its drop-down menu before you click Save.



If you work in an office environment where all the workbooks you produce with Excel 2010 must be saved in the old Excel 97-2003 format for compatibility sake, you can change the program's default Save setting so that the program always saves all new workbooks in the old file format. To do this, open the Save tab of the Excel Options dialog box (File⇨Options⇨Save or Alt+F15) and then click Excel 97-2003 Workbook in the Save Files in This Format drop-down list box before you click OK.

Using your macros

The good news is that Excel 2010 supports the creating and running of macros, using the same Microsoft Visual Basic for Applications of earlier versions. It even enables you to edit these macros in a version of VBA Editor, if you're sufficiently skilled to do so.

The biggest problem with macros comes about if you have a tendency, as I do, to map your global macros (the ones you save in the PERSONAL.XLSB workbook so that they're available when working in any Excel workbook) onto custom pull-down menus and toolbars. Because Excel 2010 retains only the File tab and Quick Access toolbar, none of the custom menus and toolbars to which you've assigned macros comes over to Excel 2010. Although the macros are still a part of their respective workbooks and continue to run, you must now run all macros either using keyboard shortcuts you assigned to them or via the Macro dialog box (click View⇨Macros⇨View Macros or press Alt+WMV or Alt+F8).



You can assign macros to buttons on the Quick Access toolbar and then run them by clicking their buttons. The only problem is that all macros you assign to this toolbar use the same generic macro button icon so that the only way to differentiate the macros is through the ScreenTip that appears when you position the mouse over the button.



To assign a macro to a generic macro on the Quick Access toolbar, open the Quick Access Toolbar tab of the Excel Options dialog box (File⇨Options⇨Quick Access Toolbar or Alt+F14) and then select Macros in the Choose Commands From drop-down list box. Excel then displays the names of all the macros in the current workbook (including all global macros saved in the PERSONAL.XLSB workbook) in the Choose Commands From list box. To assign a macro to a macro button, click its name in this list box and then click the Add button. You can then move the macro button to the desired position on the Quick Access toolbar with the Move Up and Move Down buttons and, if you so desire, make it part of a separate section on the toolbar by adding a vertical separator with the <Separator> option before and after its button.

Chapter 2

Creating a Spreadsheet from Scratch

In This Chapter

- ▶ Starting a new workbook
 - ▶ Entering the three different types of data in a worksheet
 - ▶ Creating simple formulas by hand
 - ▶ Fixing your data-entry boo-boos
 - ▶ Using the AutoCorrect feature
 - ▶ Using the AutoFill feature to complete a series of entries
 - ▶ Entering and editing formulas containing built-in functions
 - ▶ Totaling columns and rows of numbers with the AutoSum button
 - ▶ Saving your precious work and recovering workbooks after a computer crash
-

After you know how to launch Excel 2010, it's time to find out how not to get yourself into trouble when actually using it! In this chapter, you find out how to put all kinds of information into all those little, blank worksheet cells I describe in Chapter 1. Here you find out about the Excel AutoCorrect and AutoComplete features and how they can help cut down on errors and speed up your work. You also get some basic pointers on other smart ways to minimize the drudgery of data entry, such as filling out a series of entries with the AutoFill feature and entering the same thing in a bunch of cells all at the same time.

After discovering how to fill up a worksheet with all this raw data, you find out what has to be the most important lesson of all — how to save all that information on disk so that you don't ever have to enter the stuff again!

So What Ya Gonna Put in That New Workbook of Yours?

When you start Excel without specifying a document to open — which is what happens when you start the program from the Windows 7, Windows Vista, or Windows XP Start menu (refer to Chapter 1) — you get a blank workbook in a new workbook window. This workbook, temporarily named Book1, contains three blank worksheets (Sheet1, Sheet2, and Sheet3). To begin to work on a new spreadsheet, you simply start entering information in the first sheet of the Book1 workbook window.

The ins and outs of data entry

Here are a few simple guidelines (a kind of data-entry etiquette, if you will) to keep in mind when you create a spreadsheet in Sheet1 of your new workbook:

- ✓ Whenever you can, organize your information in tables of data that use adjacent (neighboring) columns and rows. Start the tables in the upper-left corner of the worksheet and work your way down the sheet, rather than across the sheet, whenever possible. When it's practical, separate each table by no more than a single column or row.
- ✓ When you set up these tables, don't skip columns and rows just to "space out" the information. In Chapter 3, you see how to place as much white space as you want between information in adjacent columns and rows by widening columns, heightening rows, and changing the alignment.
- ✓ Reserve a single column at the left edge of the table for the table's row headings.
- ✓ Reserve a single row at the top of the table for the table's column headings.
- ✓ If your table requires a title, put the title in the row above the column headings. Put the title in the same column as the row headings. You can get information on how to center this title across the columns of the entire table in Chapter 3.

In Chapter 1, I make a big deal about how big each of the worksheets in a workbook is. You may wonder why I'm now on your case about not using that space to spread out the data that you enter into it. After all, given all the real estate that comes with each Excel worksheet, you'd think conserving space would be one of the last things you'd have to worry about.

You'd be 100 percent correct . . . except for one little, itty-bitty thing: Space conservation in the worksheet equals memory conservation. You see, while a table of data grows and expands into columns and rows in new areas of the worksheet, Excel decides that it had better reserve a certain amount of computer memory and hold it open just in case you go crazy and fill that area with cell entries. Therefore, if you skip columns and rows that you really don't need to skip (just to cut down on all that cluttered data), you end up wasting computer memory that could store more information in the worksheet.

You must remember this . . .



Now you know: The amount of computer memory available to Excel determines the ultimate size of the spreadsheet you can build, not the total number of cells in the worksheets of your workbook. When you run out of memory, you've effectively run out of space — no matter how many columns and rows are still available. To maximize the information you can get into a single worksheet, always adopt the “covered wagon” approach to worksheet design by keeping your data close together.

Doing the Data-Entry Thing

Begin by reciting (in unison) the basic rule of worksheet data entry. All together now:

To enter data in a worksheet, position the cell pointer in the cell where you want the data and then begin typing the entry.

Before you can position the cell pointer in the cell where you want the entry, Excel must be in Ready mode (look for Ready as the Mode indicator at the beginning of the Status bar). When you start typing the entry, however, Excel goes through a mode change from Ready to Enter mode (and *Enter* replaces *Ready* as the Mode indicator).



If you're not in Ready mode, try pressing Esc.

As soon as you begin typing in Enter mode, the characters that you type in a cell in the worksheet area simultaneously appear on the Formula bar near the top of the screen. Typing something in the current cell also triggers a change to the Formula bar because two new buttons, Cancel and Enter, appear between the Name box drop-down button and the Insert Function button.

As you continue to type, Excel displays your progress on the Formula bar and in the active cell in the worksheet (see Figure 2-1). However, the insertion point (the flashing vertical bar that acts as your cursor) displays only at the end of the characters displayed in the cell.

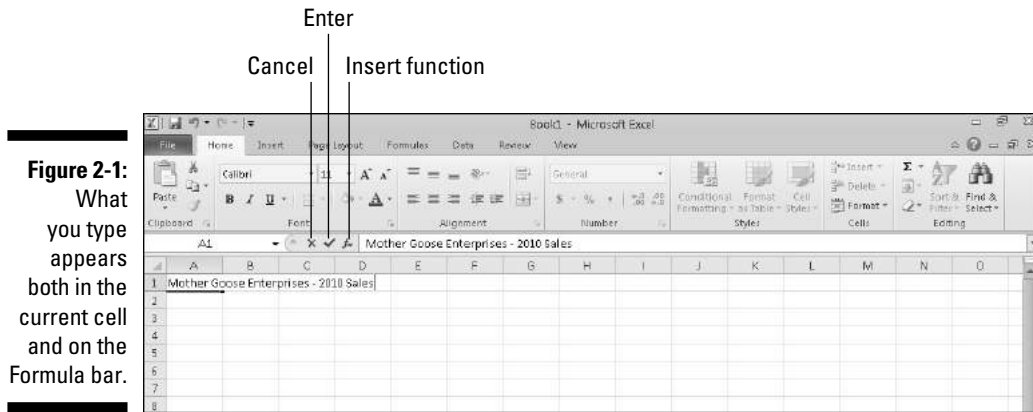


Figure 2-1:
What you type appears both in the current cell and on the Formula bar.

After you finish typing your cell entry, you still have to get it into the cell so that it stays put. When you do this, you also change the program from Enter mode back to Ready mode so that you can move the cell pointer to another cell and, perhaps, enter or edit the data there.

To complete your cell entry and, at the same time, get Excel out of Enter mode and back into Ready mode, you can click the Enter button on the Formula bar, press the Enter key, or press one of the arrow keys (↓, ↑, →, or ←) to move to another cell. You can also press the Tab key or Shift+Tab keys to complete a cell entry.

Now, even though each of these alternatives gets your text into the cell, each does something a little different afterward, so please take note:

- ✔ If you click the Enter button (the one with the check mark) on the Formula bar, the text goes into the cell, and the cell pointer just stays in the cell containing the brand-new entry.
- ✔ If you press the Enter key on your keyboard, the text goes into the cell, and the cell pointer moves down to the cell below in the next row.
- ✔ If you press one of the arrow keys, the text goes into the cell, and the cell pointer moves to the next cell in the direction of the arrow. Press ↓, and the cell pointer moves below in the next row just as it does when you finish off a cell entry with the Enter key. Press → to move the cell pointer right to the cell in the next column; press ← to move the cell pointer left to the cell in the previous column; and press ↑ to move the cell pointer up to the cell in the next row above.



Getting the Enter key to put the cell pointer where you want it

Excel automatically advances the cell pointer to the next cell down in the column every time you press Enter to complete the cell entry. If you want to customize Excel so that pressing Enter doesn't move the cell pointer when the program enters your data, or to have it move the cell pointer to the next cell up, left, or right, open the Advanced tab of the Excel Options dialog box (Alt+F1A).

To prevent the cell pointer from moving at all, select the After Pressing Enter, Move Selection check box to remove its check mark. To have the cell pointer move in another direction, click the Direction pop-up list box right below and then select the new direction you want to use (Right, Up, or Left). When you finish changing the settings, click OK or press Enter.

- ✓ If you press Tab, the text goes into the cell, and the cell pointer moves to the adjacent cell in the column on the immediate right (the same as pressing the → key). If you press Shift+Tab, the cell pointer moves to the adjacent cell in the column on the immediate left (the same as pressing the ← key) after putting in the text.

No matter which of the methods you choose when putting an entry in its place, as soon as you complete your entry in the current cell, Excel deactivates the Formula bar by removing the Cancel and Enter buttons. Thereafter, the data you entered continues to appear in the cell in the worksheet (with certain exceptions that I discuss later in this chapter), and every time you put the cell pointer into that cell, the data will reappear on the Formula bar as well.

If, while still typing an entry or after finishing typing but prior to completing the entry, you realize that you're just about to stick it in the wrong cell, you can clear and deactivate the Formula bar by clicking the Cancel button (the one with the X in it) or by pressing Esc. If, however, you don't realize that you had the wrong cell until after you enter your data there, you have to either move the entry to the correct cell (something you find out how to do in Chapter 4) or delete the entry (see Chapter 4) and then reenter the data in the correct cell.

It Takes All Types

Unbeknownst to you while you go about happily entering data in your spreadsheet, Excel constantly analyzes the stuff you type and classifies it into one of three possible data types: a piece of *text*, a *value*, or a *formula*.

If Excel finds that the entry is a formula, the program automatically calculates the formula and displays the computed result in the worksheet cell (you continue to see the formula itself, however, on the Formula bar). If Excel is satisfied that the entry does not qualify as a formula (I give you the qualifications for an honest-to-goodness formula a little later in this chapter), the program then determines whether the entry should be classified as text or as a value.

Excel makes this distinction between text and values so that it knows how to align the entry in the worksheet. It aligns text entries with the left edge of the cell and values with the right edge. Because most formulas work properly only when they are fed values, by differentiating text from values, the program knows which will and will not work in the formulas that you build. Suffice to say that you can foul up your formulas but good if they refer to any cells containing text where Excel expects values to be.

The telltale signs of text

A text entry is simply an entry that Excel can't pigeonhole as either a formula or value. This makes text the catchall category of Excel data types. As a practical rule, most text entries (also known as *labels*) are a combination of letters and punctuation or letters and numbers. Text is used mostly for titles, headings, and notes in the worksheet.

You can tell right away whether Excel has accepted a cell entry as text because text entries automatically align at the left edge of their cells. If the text entry is wider than the cell can display, the data spills into the neighboring cell or cells on the right, *as long as those cells remain blank* (see Figure 2-2).

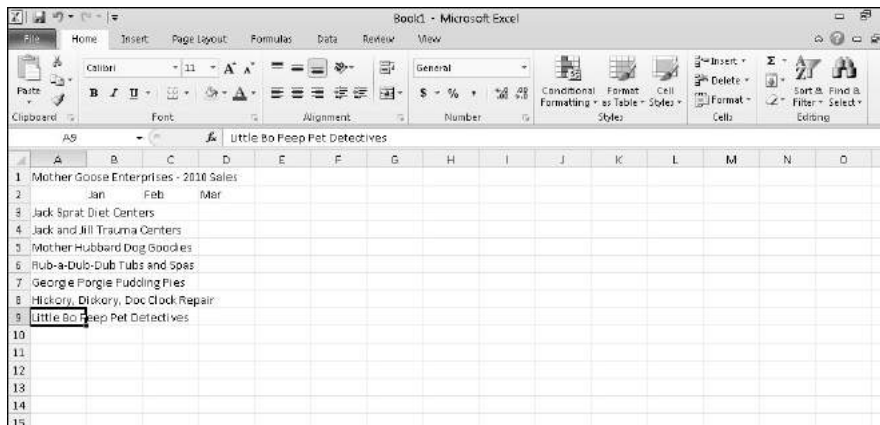


Figure 2-2:
Long text entries spill over into neighboring blank cells.



To Excel, text is nothing but a big zero

Use the AutoCalculate indicator to prove to yourself that Excel gives all text entries the value of 0 (zero). As an example, enter the number **10** in one cell and then some stupid piece of text, such as **Excel is like a box of chocolates**, in the cell directly below. Then drag up so that

both cells (the one with 10 and the one with the text) are highlighted. Take a gander at the AutoCalculate indicator on the Status bar, and you see that it reads Average: 10, Count: 2, and Sum: 10, proving that the text adds nothing to the total value of these two cells.

If, sometime later, you enter information in a cell that contains spillover text from a cell to its left, Excel cuts off the spillover of the long text entry (see Figure 2-3). Not to worry: Excel doesn't actually lop these characters off the cell entry — it simply shaves the display to make room for the new entry. To redisplay the seemingly missing portion of the long text entry, you have to widen the column that contains the cell where the text is entered. (To find out how to do this, skip ahead to Chapter 3.)

	A	B	C	D	E	F	G	H	I
1	Mother Goose Enterprises - 2010 Sales								
2		Jan	Feb	Mar					
3	Jack Sprat	80138.58							
4	Jack and Jill Trauma Centers								
5	Mother Hubbard Dog Goodies								
6	Rub-a-Dub-Dub Tubs and Spas								
7	Georgie Porgie Pudding Pies								
8	Hickory, Dickory, Doc Clock Repair								
9	Little Bo Peep Pet Detectives								
10									
11									
12									
13									
14									
15									

Figure 2-3:
Entries in cells to the right cut off the spillover text in cells on the left.

How Excel evaluates its values

Values are the building blocks of most of the formulas that you create in Excel. As such, values come in two flavors: numbers that represent quantities (*14 stores* or *\$140,000 dollars*) and numbers that represent dates (*July 30, 1995*) or times (*2 p.m.*).

You can tell whether Excel has accepted your entry as a value because values automatically align at the right edge of their cells. If the value that you enter is wider than the column containing the cell can display, Excel automatically converts the value to (of all things) *scientific notation*. To restore a value that's been converted into that weird scientific notation stuff to a regular number, simply widen the column for that cell. (Read how in Chapter 3.)

Making sure that Excel's got your number

When building a new worksheet, you'll probably spend a lot of your time entering numbers, representing all types of quantities from money that you made (or lost) to the percentage of the office budget that went to coffee and donuts. (You mean you don't get donuts?)

To enter a numeric value that represents a positive quantity, like the amount of money you made last year, just select a cell, type the numbers — for example, **459600** — and complete the entry in the cell by clicking the Enter button, pressing the Enter key, and so on. To enter a numeric value that represents a negative quantity, such as the amount of money the office spent on coffee and donuts last year, begin the entry with the minus sign or hyphen (–) before typing the numbers and then complete the entry. For example, **–175** (that's not too much to spend on coffee and donuts when you just made \$459,600).

If you're trained in accounting, you can enclose the negative number (that's *expense* to you) in parentheses. You'd enter it like this: **(175)**. If you go to all the trouble to use parentheses for your negatives (expenses), Excel goes ahead and automatically converts the number so that it begins with a minus sign; if you enter **(175)** in the Coffee and Donut expense cell, Excel spits back **–175**. (Relax, you can find out how to get your beloved parentheses back for the expenses in your spreadsheet in Chapter 3.)

With numeric values that represent dollar amounts, like the amount of money you made last year, you can include dollar signs (\$) and commas (,) just as they appear in the printed or handwritten numbers you're working from. Just be aware that when you enter a number with commas, Excel assigns a number format to the value that matches your use of commas. (For more information on number formats and how they are used, see Chapter 3.) Likewise, when you preface a financial figure with a dollar sign, Excel assigns an appropriate dollar-number format to the value (one that automatically inserts commas between the thousands).

When entering numeric values with decimal places, use the period as the decimal point. When you enter decimal values, the program automatically adds a zero before the decimal point (Excel inserts 0.34 in a cell when you enter **.34**) and drops trailing zeros entered after the decimal point (Excel inserts 12.5 in a cell when you enter **12.50**).

If you don't know the decimal equivalent for a value that contains a fraction, you can just go ahead and enter the value with its fraction. For example, if you don't know that 2.1875 is the decimal equivalent for $2\frac{3}{16}$, just type **2 3/16** (making sure to add a space between the 2 and 3) in the cell. After completing the entry, when you put the cell pointer in that cell, you see $2\frac{3}{16}$ in the cell of the worksheet, but 2.1875 appears on the Formula bar. As you see in Chapter 3, it's then a simple trick to format the display of $2\frac{3}{16}$ in the cell so that it matches the 2.1875 on the Formula bar.



If you need to enter simple fractions, such as $\frac{3}{4}$ or $\frac{5}{8}$, you must enter them as a mixed number preceded by zero; for example, enter **0 3/4** or **0 5/8** (be sure to include a space between the zero and the fraction). Otherwise, Excel thinks that you're entering the dates March 4 ($3/4$) and May 8 ($5/8$).

When entering in a cell a numeric value that represents a percentage (so much out of a hundred), you have this choice:

- ✓ You can either divide the number by 100 and enter the decimal equivalent (by moving the decimal point two places to the left like your teacher taught you; for example, enter **.12** for 12 percent).
- ✓ You can enter the number with the percent sign (for example, enter **12%**).

Either way, Excel stores the decimal value in the cell (0.12 in this example). If you use the percent sign, Excel assigns a percentage-number format to the value in the worksheet so that it appears as 12%.

How to fix your decimal places (when you don't even know they're broken)

If you find that you need to enter a whole slew of numbers that use the same number of decimal places, you can turn on Excel's Fixed Decimal setting and have the program enter the decimals for you. This feature really comes in handy when you have to enter hundreds of financial figures that all use two decimal places (for example, for the number of cents).

To *fix* the number of decimal places in a numeric entry, follow these steps:

1. Choose File⇨Options⇨Advanced or press Alt+F1A.

The Advanced tab of the Excel Options dialog box opens.

2. Click the Automatically Insert a Decimal Point check box in the Editing Options section to fill it with a check mark.

By default, Excel fixes the decimal place two places to the left of the last number you type. To change the default Places setting, go to Step 3; otherwise move to Step 4.



Don't get in a fix over your decimal places!

When the Fixed Decimal setting is on, Excel adds a decimal point to all the numeric values that you enter. However, if you want to enter a number without a decimal point, or one with a decimal point in a position different from the one called for by this feature, you have to remember to type the decimal point (period) yourself. For example, to enter the number 1099 instead of 10.99 when the decimal point is fixed

at two places, type **1099** followed immediately by a period (.) in the cell.

And, for heaven's sake, please don't forget to turn off the Fixed Decimal feature before you work on another worksheet or exit Excel. Otherwise, when you intend to enter values, such as 20, you'll end up with 0.2 instead, and you won't have a clue what's going on!

3. (Optional) Type a new number in the Places text box or use the spinner buttons to change the value.

For example, you could change the Places setting to 3 to enter numbers with the following decimal placement: 00.000.

4. Click OK or press Enter.

Excel displays the Fixed Decimal status indicator on the Status bar to let you know that the Fixed Decimal feature is now active.

After fixing the decimal place in numeric values, Excel automatically adds a decimal point to any numeric value that you enter using the number of places you selected; all you do is type the digits and complete the entry in the cell. For example, to enter the numeric value 100.99 in a cell after fixing the decimal point to two places, type the digits **10099** without adding any period for a decimal point. When you complete the cell entry, Excel automatically inserts a decimal point two places from the right in the number you typed, leaving 100.99 in the cell.

When you're ready to return to normal data entry for numerical values (where you enter any decimal points yourself), open the Advanced tab of the Excel Options dialog box (Alt+F1A), click the Automatically Insert a Decimal Point check box again, this time to clear it, and then click OK or press Enter. Excel removes the Fixed Decimal indicator from the Status bar.

Tapping on the old ten-key

You can make the Fixed Decimal feature work even better by selecting the block of cells where you want to enter numbers (see "Entries all around the block," later in this chapter) and then pressing Num Lock so that you can enter all the data for this cell selection from the numeric keypad (à la ten-key adding machine).

Using this approach, all you have to do to enter the range of values in each cell is type the number's digits and press Enter on the numeric keypad. Excel inserts the decimal point in the proper place while it moves the cell pointer down to the next cell. Even better, when you finish entering the last value in a column, pressing Enter automatically moves the cell pointer to the cell at the top of the next column in the selection.

Look at Figures 2-4 and 2-5 to see how you can make the ten-key method work for you. In Figure 2-4, the Fixed Decimal feature is turned on (using the default of two decimal places), and the block of cells from B3 through D9 are selected. You also see that six entries have already been made in cells B3 through B8 and a seventh, 30834.63, is about to be completed in cell B9. To make this entry when the Fixed Decimal feature is on, you simply type **3083463** from the numeric keypad.

Figure 2-4:
To enter the value 30834.63 in cell B9, type **3083463** and press Enter.

	A	B	C	D	E	F	G	H	I
1	Mother Goose Enterprises - 2010 Sales								
2		Jan	Feb	Mar					
3	Jack Sprat	80138.58							
4	Jack and J	12345.62							
5	Mother H	12657.05							
6	Rub-a-Du	17619.79							
7	Georgie P	57133.56							
8	Hickory, D	168591							
9	Little Bo B	3083463	atectives						
10									
11									
12									
13									
14									
15									

In Figure 2-5, check out what happens when you press Enter (on either the regular keyboard or the numeric keypad). Not only does Excel automatically add the decimal point to the value in cell B9, but it also moves the cell pointer up and over to cell C3 where you can continue entering the values for this column.

Entering dates with no debate

At first look, it may strike you a bit odd to enter dates and times as values in the cells of a worksheet rather than text. The reason for this is simple, really: Dates and times entered as values can be used in formula calculations, whereas dates and times entered as text cannot. For example, if you enter two dates as values, you can then set up a formula that subtracts the more recent date from the older date and returns the number of days between them. This kind of thing just couldn't happen if you were to enter the two dates as text entries.

Figure 2-5:
Press Enter to complete the 30834.63 entry in cell B9. Excel automatically moves the cell pointer up and over to cell C3.

	A	B	C	D	E	F	G	H	I
1	Mother Goose Enterprises - 2010 Sales								
2		Jan	Feb	Mar					
3	Jack Sprat	80138.58							
4	Jack and J	12345.62							
5	Mother H	12657.05							
6	Rub-a-Du	17619.79							
7	Georgie P	57133.56							
8	Hickory, D	168591							
9	Little Bo F	3083463							
10									
11									
12									
13									
14									
15									

Excel determines whether the date or time that you type is a value or text by the format that you follow. If you follow one of Excel's built-in date and time formats, the program recognizes the date or time as a value. If you don't follow one of the built-in formats, the program enters the date or time as a text entry — it's as simple as that.

Excel recognizes the following time formats:

3 AM or 3 PM

3 A or 3 P (upper- or lowercase a or p — Excel inserts 3:00 AM or 3:00 PM)

3:21 AM or 3:21 PM (upper- or lowercase am or pm)

3:21:04 AM or 3:21:04 PM (upper- or lowercase am or pm)

15:21

15:21:04



Excel isn't fussy, so you can enter the AM or PM designation in the date in any manner — uppercase letters, lowercase letters, or even a mix of the two.

Excel knows the following date formats. (Month abbreviations always use the first three letters of the name of the month: Jan, Feb, Mar, and so forth.)

November 6, 2008 or November 6, 08 (appear in cell as 6-Nov-08)

11/6/08 or 11-6-08 (appear in cell as 11/6/2008)

6-Nov-08 or 6/Nov/08 or even 6Nov08 (all appear in cell as 6-Nov-08)

11/6 or 6-Nov or 6/Nov or 6Nov (all appear in cell as 6-Nov)

Nov-06 or Nov/06 or Nov06 (all appear in cell as 6-Nov)



The dating game

Dates are stored as serial numbers that indicate how many days have elapsed from a particular starting date; times are stored as decimal fractions indicating the elapsed part of the 24-hour period. Excel supports two date systems: the 1900 date system used by Excel in Windows, where January 1, 1900 is the starting date (serial number 1) and the 1904 system used by Excel for the Macintosh, where January 2, 1904 is the starting date.

If you ever get a hold of a workbook created with Excel for the Macintosh that contains dates that seem all screwed up when you open the file, you can rectify this problem by opening the Advanced tab of the Excel Options dialog box (File⇒Options⇒Advanced or Alt+F1A) and then clicking the Use 1904 Date System check box in the When Calculating This Workbook section before you click OK.

Make it a date in the 21st Century

Contrary to what you might think, when entering dates in the 21st Century, you need to enter only the last two digits of the year. For example, to enter the date January 6, 2008, in a worksheet, I enter **1/6/08** in the target cell. Likewise, to put the date February 15, 2010, in a worksheet, I enter **2/15/10** in the target cell.

This system of having to put in only the last two digits of dates in the 21st Century works only for dates in the first three decades of the new century (2000 through 2029). To enter dates for the years 2030 on, you need to input all four digits of the year.

This also means, however, that to put in dates in the first three decades of the 20th Century (1900 through 1929), you must enter all four digits of the year. For example, to put in the date July 21, 1925, you have to enter **7/21/1925** in the target cell. Otherwise, if you enter just the last two digits (**25**) for the year part of the date, Excel enters a date for the year 2025 and not 1925!

Excel 2010 always displays all four digits of the year in the cell and on the Formula bar even when you only enter the last two. For example, if you enter **11/06/08** in a cell, Excel automatically displays 11/6/2008 in the worksheet cell (and on the Formula bar when that cell is current).

Therefore, by looking at the Formula bar, you can always tell when you've entered a 20th rather than a 21st Century date in a cell even if you can't keep straight the rules for when to enter just the last two digits rather than all four. (Read Chapter 3 for information on how to format your date entries so that only the last digits display in the worksheet.)



For information on how to perform simple arithmetic operations between the dates and time you enter in a worksheet and have the results make sense, see the information about dates in Chapter 3.

Fabricating those fabulous formulas!

As entries go in Excel, formulas are the real workhorses of the worksheet. If you set up a formula properly, it computes the correct answer when you enter the formula into a cell. From then on, the formula stays up to date, recalculating the results whenever you change any of the values that the formula uses.

You let Excel know that you're about to enter a formula (rather than some text or a value), in the current cell by starting the formula with the equal sign (=). Most simple formulas follow the equal sign with a built-in function, such as `SUM` or `AVERAGE`. (See the section "Inserting a function into a formula with the Insert Function button," later in this chapter, for more information on using functions in formulas.) Other simple formulas use a series of values or cell references that contain values separated by one or more of the following mathematical operators:

- + (plus sign) for addition
- (minus sign or hyphen) for subtraction
- * (asterisk) for multiplication
- / (slash) for division
- ^ (caret) for raising a number to an exponential power

For example, to create a formula in cell C2 that multiplies a value entered in cell A2 by a value in cell B2, enter the following formula in cell C2: `=A2*B2`.

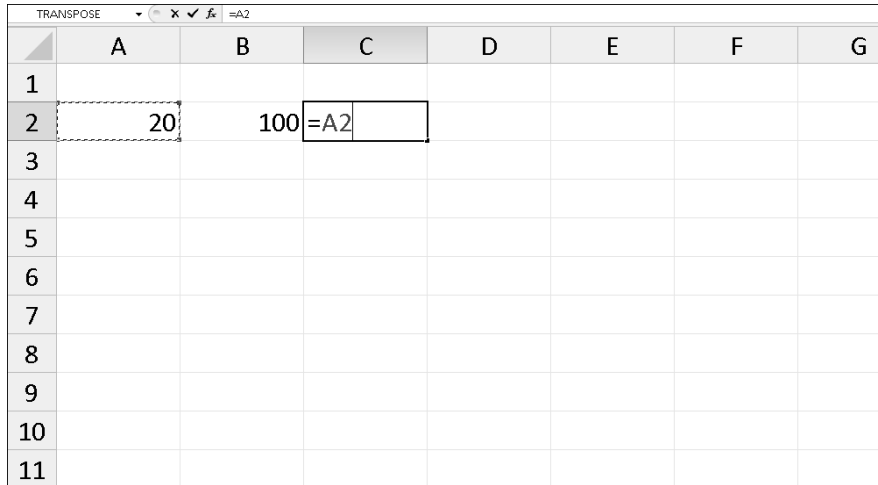
To enter this formula in cell C2, follow these steps:

1. **Select cell C2.**
2. **Type the entire formula `=A2*B2` in the cell.**
3. **Press Enter.**

Or

1. **Select cell C2.**
2. **Type = (equal sign).**
3. **Select cell A2 in the worksheet by using the mouse or the keyboard.**

This action places the cell reference A2 in the formula in the cell (as shown in Figure 2-6).



The screenshot shows a spreadsheet with columns A through G and rows 1 through 11. The formula bar at the top displays '=A2'. In cell A2, the value '20' is entered. In cell B2, the value '100' is entered. In cell C2, the formula '=A2' is entered, and a dashed border indicates that cell B2 is selected as a reference for the formula.

	A	B	C	D	E	F	G
1							
2	20	100	=A2				
3							
4							
5							
6							
7							
8							
9							
10							
11							

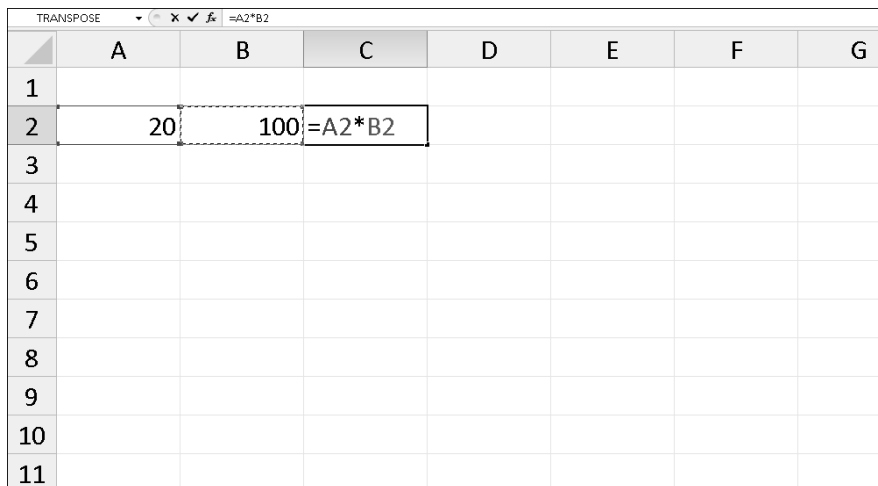
Figure 2-6:
To start the formula, type = and then select cell A2.

4. Type * (Shift+8 on the top row of the keyboard).

The asterisk is used for multiplication rather than the \times symbol you used in school.

5. Select cell B2 in the worksheet by using the mouse or the keyboard.

This action places the cell reference B2 in the formula (as shown in Figure 2-7).



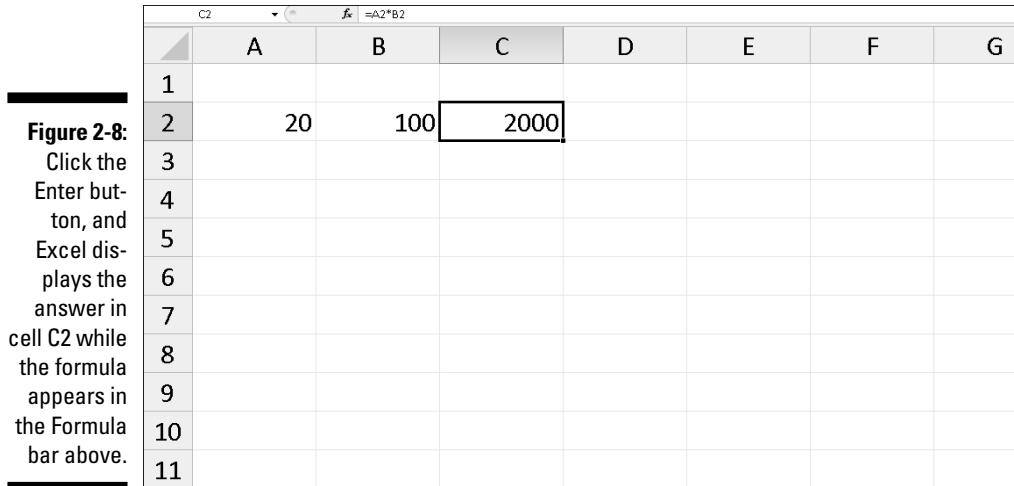
The screenshot shows the same spreadsheet as Figure 2-6. The formula bar now displays '=A2*B2'. In cell C2, the formula '=A2*B2' is entered, and a dashed border indicates that cell B2 is selected as a reference for the formula.

	A	B	C	D	E	F	G
1							
2	20	100	=A2*B2				
3							
4							
5							
6							
7							
8							
9							
10							
11							

Figure 2-7:
To complete the second part of the formula, type * and select cell B2.

6. Click the Enter button to complete the formula entry while keeping the cell pointer in cell C2.

Excel displays the calculated answer in cell C2 and the formula `=A2*B2` in the Formula bar (as shown in Figure 2-8).



When you finish entering the formula `=A2*B2` in cell C2 of the worksheet, Excel displays the calculated result, depending on the values currently entered in cells A2 and B2. The major strength of the electronic spreadsheet is the capability of formulas to change their calculated results automatically to match changes in the cells referenced by the formulas.

Now comes the fun part: After creating a formula like the preceding one that refers to the values in certain cells (rather than containing those values itself), you can change the values in those cells, and Excel automatically recalculates the formula, using these new values and displaying the updated answer in the worksheet! Using the example shown in Figure 2-8, suppose that you change the value in cell B2 from 100 to 50. The moment that you complete this change in cell B2, Excel recalculates the formula and displays the new answer, 1000, in cell C2.

If you want it, just point it out

The method of selecting the cells you use in a formula, rather than typing their cell references, is *pointing*. Pointing is quicker than typing and reduces the risk that you might mistype a cell reference. When you type a cell reference, you can easily type the wrong column letter or row number and not realize your mistake by looking at the calculated result returned in the cell.



If you select the cell that you want to use in a formula either by clicking it or moving the cell pointer to it, you have less chance of entering the wrong cell reference.

Altering the natural order of operations

Many formulas that you create perform more than one mathematical operation. Excel performs each operation, moving from left to right, according to a strict pecking order (the natural order of arithmetic operations). In this order, multiplication and division pull more weight than addition and subtraction and, therefore, perform first, even if these operations don't come first in the formula (when reading from left to right).

Consider the series of operations in the following formula:

$$=A2+B2*C2$$

If cell A2 contains the number 5, B2 contains the number 10, and C2 contains the number 2, Excel evaluates the following formula:

$$=5+10*2$$

In this formula, Excel multiplies 10 times 2 to equal 20 and then adds this result to 5 to produce the result 25.

If you want Excel to perform the addition between the values in cells A2 and B2 before the program multiplies the result by the value in cell C2, enclose the addition operation in parentheses as follows:

$$=(A2+B2)*C2$$

The parentheses around the addition tell Excel that you want this operation performed before the multiplication. If cell A2 contains the number 5, B2 contains the number 10, and C2 contains the number 2, Excel adds 5 and 10 to equal 15 and then multiplies this result by 2 to produce the result 30.

In fancier formulas, you may need to add more than one set of parentheses, one within another (like the wooden Russian dolls that nest within each other) to indicate the order in which you want the calculations to take place. When nesting parentheses, Excel first performs the calculation contained in the most inside pair of parentheses and then uses that result in further calculations as the program works its way outward. For example, consider the following formula:

$$=(A4+(B4-C4))*D4$$

Excel first subtracts the value in cell C4 from the value in cell B4, adds the difference to the value in cell A4, and then finally multiplies that sum by the value in D4.

Without the additions of the two sets of nested parentheses, left to its own devices, Excel would first multiply the value in cell C4 by that in D4, add the value in A4 to that in B4, and then perform the subtraction.



Don't worry too much when nesting parentheses in a formula if you don't pair them properly so that you have a right parenthesis for every left parenthesis in the formula. If you do not include a right parenthesis for every left one, Excel displays an alert dialog box that suggests the correction needed to balance the pairs. If you agree with the program's suggested correction, you simply click the Yes button. However, be sure that you only use parentheses: (). Excel balks at the use of brackets — [] — or braces — { } — in a formula by giving you an Error alert box.

Formula flub-ups

Under certain circumstances, even the best formulas can appear to have freaked out after you get them in your worksheet. You can tell right away that a formula's gone haywire because instead of the nice calculated value you expected to see in the cell, you get a strange, incomprehensible message in all uppercase letters beginning with the number sign (#) and ending with an exclamation point (!) or, in one case, a question mark (?). This weirdness, in the parlance of spreadsheets, is as an *error value*. Its purpose is to let you know that some element — either in the formula itself or in a cell referred to by the formula — is preventing Excel from returning the anticipated calculated value.



When one of your formulas returns one of these error values, an alert indicator (in the form of an exclamation point in a diamond) appears to the left of the cell when it contains the cell pointer, and the upper-left corner of the cell contains a tiny green triangle. When you position the mouse pointer on this alert indicator, Excel displays a brief description of the formula error and adds a drop-down button to the immediate right of its box. When you click this button, a pop-up menu appears with a number of related options. To access online help on this formula error, including suggestions on how to get rid of the error, click the Help on This Error item on this pop-up menu.

The worst thing about error values is that they can contaminate other formulas in the worksheet. If a formula returns an error value to a cell and a second formula in another cell refers to the value calculated by the first formula, the second formula returns the same error value, and so on down the line.

After an error value shows up in a cell, you have to discover what caused the error and edit the formula in the worksheet. In Table 2-1, I list some error values that you might run into in a worksheet and then explain the most common causes.

<i>What Shows Up in the Cell</i>	<i>What's Going On Here?</i>
#DIV/0!	Appears when the formula calls for division by a cell that either contains the value 0 or, as is more often the case, is empty. Division by zero is a no-no in mathematics.
#NAME?	Appears when the formula refers to a <i>range name</i> (see Chapter 6 for info on naming ranges) that doesn't exist in the worksheet. This error value appears when you type the wrong range name or fail to enclose in quotation marks some text used in the formula, causing Excel to think that the text refers to a range name.
#NULL!	Appears most often when you insert a space (where you should have used a comma) to separate cell references used as arguments for functions.
#NUM!	Appears when Excel encounters a problem with a number in the formula, such as the wrong type of argument in an Excel function or a calculation that produces a number too large or too small to be represented in the worksheet.
#REF!	Appears when Excel encounters an invalid cell reference, such as when you delete a cell referred to in a formula or paste cells over the cells referred to in a formula.
#VALUE!	Appears when you use the wrong type of argument or operator in a function, or when you call for a mathematical operation that refers to cells that contain text entries.

Fixing Those Data Entry Flub-Ups

We all wish we were perfect, but alas, because so few of us are, we are best off preparing for those inevitable times when we mess up. When entering vast quantities of data, it's easy for those nasty little typos to creep into your work. In your pursuit of the perfect spreadsheet, here are things you can do. First, get Excel to correct certain data entry typos automatically when they happen with its AutoCorrect feature. Second, manually correct any disgusting little errors that get through, either while you're still in the process of making the entry in the cell or after the entry has gone in.

You really AutoCorrect that for me

The AutoCorrect feature is a godsend for those of us who tend to make the same stupid typos over and over. With AutoCorrect, you can alert Excel 2010 to your own particular typing gaffes and tell the program how it should automatically fix them for you.

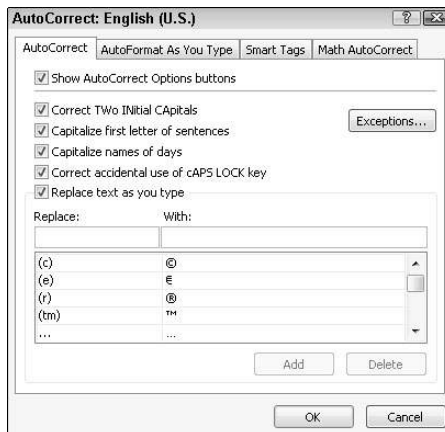
When you first install Excel, the AutoCorrect feature already knows to automatically correct two initial capital letters in an entry (by lowercasing the second capital letter), to capitalize the name of the days of the week, and to replace a set number of text entries and typos with particular substitute text.

You can add to the list of text replacements at any time when using Excel. These text replacements can be of two types: typos that you routinely make along with the correct spelling, and abbreviations or acronyms that you type all the time along with their full forms.

To add to the replacements:

- 1. Choose File⇨Options⇨Proofing or press Alt+FIP and then click the AutoCorrect Options button or press Alt+A.**
Excel opens the AutoCorrect dialog box shown in Figure 2-9.
- 2. On the AutoCorrect tab in this dialog box, enter the typo or abbreviation in the Replace text box.**
- 3. Enter the correction or full form in the With text box.**
- 4. Click the Add button or press Enter to add the new typo or abbreviation to the AutoCorrect list.**
- 5. Click the OK button to close the AutoCorrect dialog box.**

Figure 2-9: Use the Replace and With options in the AutoCorrect dialog box to add all typos and abbreviations you want Excel to automatically correct or fill out.



Cell editing etiquette

Despite the help of AutoCorrect, some mistakes are bound to get you. How you correct them really depends upon whether you notice before or after completing the cell entry.

- ✓ If you catch the mistake before you complete an entry, you can delete it by pressing your Backspace key until you remove all the incorrect characters from the cell. Then you can retype the rest of the entry or the formula before you complete the entry in the cell.
- ✓ If you don't discover the mistake until after you've completed the cell entry, you have a choice of replacing the whole thing or editing just the mistakes.
- ✓ When dealing with short entries, you'll probably want to take the replacement route. To replace a cell entry, position the cell pointer in that cell, type your replacement entry, and then click the Enter button or press one of the arrow keys.
- ✓ When the error in an entry is relatively easy to fix and the entry is on the long side, you'll probably want to edit the cell entry rather than replace it. To edit the entry in the cell, simply double-click the cell or select the cell and then press F2.
- ✓ Doing either one reactivates the Formula bar by displaying the Enter and Cancel buttons once again and placing the insertion point in the cell entry in the worksheet. (If you double-click, the insertion point positions itself wherever you click; press F2, and the insertion point positions itself after the last character in the entry.)
- ✓ Notice also that the mode indicator changes to Edit. While in this mode, you can use the mouse or the arrow keys to position the insertion point at the place in the cell entry that needs fixing.

In Table 2-2, I list the keystrokes that you can use to reposition the insertion point in the cell entry and delete unwanted characters. If you want to insert new characters at the insertion point, simply start typing. If you want to delete existing characters at the insertion point while you type new ones, press the Insert key on your keyboard to switch from the normal insert mode to overwrite mode. To return to normal insert mode, press Insert a second time. When you finish making corrections to the cell entry, you must complete the edits by pressing Enter before Excel updates the contents of the cell.



While Excel is in Edit mode, you must reenter the edited cell contents by either clicking the Enter button or pressing Enter. You can use the arrow keys as a way to complete an entry only when the program is in Enter mode. When the program is in Edit mode, the arrow keys move the insertion point only through the entry that you're editing, not to a new cell.



A tale of two edits: Cell versus Formula bar editing

Excel gives you a choice between editing a cell's contents either in the cell or on the Formula bar. Whereas most of the time, editing right in the cell is just fine, when dealing with really long entries (like humongous formulas that go on forever or text entries that take up paragraphs), you may prefer to do your editing on the Formula bar. This is because Excel 2010 automatically adds up and down scroll arrow buttons to the end of the Formula bar when a cell entry is too long to display completely on a single row. These scroll arrow buttons enable

you to display each line of the cell's long entry without expanding the Formula bar (as in earlier versions of Excel) and thereby obscuring the top part of the Worksheet area.

To edit the contents in the Formula bar rather than in the cell itself, click the appropriate scroll arrow button to display the line with the contents that needs editing and then click the I-beam mouse pointer at the place in the text or numbers that requires modification to set the insertion cursor.

Table 2-2 Keystrokes for Fixing Those Cell Entry Flub-Ups

<i>Keystroke</i>	<i>What the Keystroke Does</i>
Delete	Deletes the character to the right of the insertion point
Backspace	Deletes the character to the left of the insertion point
→	Positions the insertion point one character to the right
←	Positions the insertion point one character to the left
↑	Positions the insertion point, when it is at the end of the cell entry, to its preceding position to the left
End or ↓	Moves the insertion point after the last character in the cell entry
Home	Moves the insertion point in front of the first character of the cell entry
Ctrl+→	Positions the insertion point in front of the next word in the cell entry
Ctrl+←	Positions the insertion point in front of the preceding word in the cell entry
Insert	Switches between insert and overwrite mode

Taking the Drudgery out of Data Entry

Before leaving the topic of data entry, I feel duty-bound to cover some of the shortcuts that really help to cut down on the drudgery of this task. These data-entry tips include AutoComplete and AutoFill features as well as doing data entry in a preselected block of cells and making the same entry in a bunch of cells all at the same time.

I'm just not complete without you

The AutoComplete feature in Excel 2010 is not something you can do anything about, just something to be aware of while you enter your data. In an attempt to cut down on your typing load, our friendly software engineers at Microsoft came up with the AutoComplete feature.

AutoComplete is like a moronic mind reader who anticipates what you might want to enter next based on what you just entered. This feature comes into play only when you're entering a column of text entries. (It does not come into play when entering values or formulas or when entering a row of text entries.) When entering a column of text entries, AutoComplete looks at the kinds of entries that you make in that column and automatically duplicates them in subsequent rows whenever you start a new entry that begins with the same letter as an existing entry.

For example, suppose that I enter **Jack Sprat Diet Centers** (one of the companies owned and operated by Mother Goose Enterprises) in cell A2 and then move the cell pointer down to cell A3 in the row below and press **J** (lowercase or uppercase, it doesn't matter). AutoComplete immediately inserts the remainder of the familiar entry — *ack Sprat Diet Centers* — in this cell after the J, as shown in Figure 2-10.

Now this is great if I happen to need Jack Sprat Diet Centers as the row heading in both cells A2 and A3. Anticipating that I might be typing a different entry that just happens to start with the same letter as the one above, AutoComplete automatically selects everything after the first letter in the duplicated entry it inserted (from *ack* on, in this example). This enables me to replace the duplicate text supplied by AutoComplete just by continuing to type. For example, after capturing the Excel screen that you see in Figure 2-10, I entered Jack and Jill Trauma Centers — another of Mother's companies — in cell A3.

Figure 2-10:
Auto
Complete
duplicates
a previous
entry if you
start a new
entry in
the same
column that
begins with
the same
letter.

	A	B	C	D	E	F	G
1							
2	Jack Sprat Diet Centers						
3	Jack Sprat Diet Centers						
4							
5							
6							
7							
8							
9							
10							
11							

If you override a duplicate supplied by AutoComplete in a column by typing one of your own (as in my example with changing Jack Sprat Diet Centers to Jack and Jill Trauma Centers in cell A3), you effectively shut down its ability to supply any more duplicates for that particular letter. For instance, in my example, after changing Jack Sprat Diet Centers to Jack and Jill Trauma Centers in cell A3, AutoComplete doesn't do anything if I then type **J** in cell A4. In other words, you're on your own if you don't continue to accept AutoComplete's typing suggestions.



If you find that the AutoComplete feature is really making it hard for you to enter a series of cell entries that all start with the same letter but are otherwise not alike, you can turn off the AutoComplete feature. Click **File** → **Options** → **Advanced** or press **Alt+F1A** to select the **Advanced** tab of the Excel Options dialog box. Then, select the **Enable AutoComplete for Cell Values** check box in the **Editing Options** section to remove its check mark before clicking **OK**.

Fill 'er up with AutoFill

Many of the worksheets that you create with Excel require the entry of a series of sequential dates or numbers. For example, a worksheet may require you to title the columns with the 12 months, from January through December, or to number the rows from 1 to 100.

Excel's AutoFill feature makes short work of this kind of repetitive task. All you have to enter is the starting value for the series. In most cases, AutoFill is smart enough to figure out how to fill out the series for you when you drag the fill handle to the right (to take the series across columns to the right) or down (to extend the series to the rows below).



The AutoFill handle looks like this — + — and appears only when you position the mouse pointer on the lower-right corner of the active cell (or the last cell, when you've selected a block of cells). If you drag a cell selection with the white cross mouse pointer rather than the AutoFill handle, Excel simply extends the cell selection to those cells you drag through (see Chapter 3). If you drag a cell selection with the arrowhead pointer, Excel moves the cell selection (see Chapter 4).

When creating a series with the fill handle, you can drag in only one direction at a time. For example, you can fill the series or copy the entry to the range to the left or right of the cell that contains the initial values, or you can fill the series or copy to the range above or below the cell containing the initial values. You can't, however, fill or copy the series to two directions at the same time (such as down and to the right by dragging the fill handle diagonally).

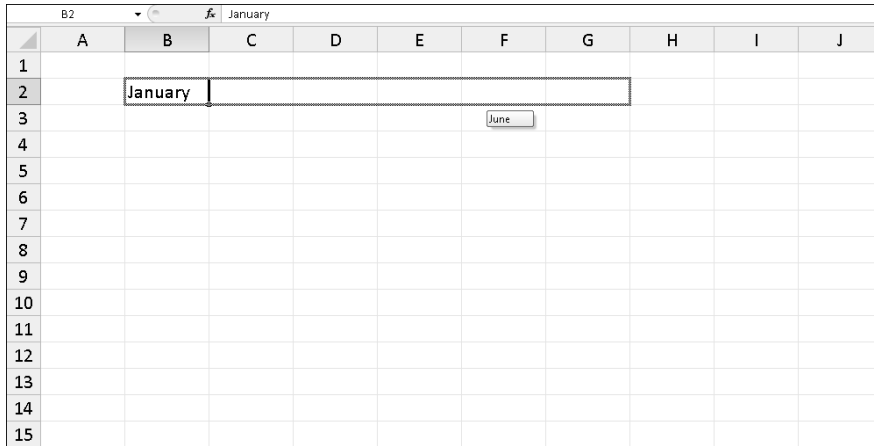
While you drag the mouse, the program keeps you informed of whatever entry will be entered into the last cell selected in the range by displaying that entry next to the mouse pointer (a kind of AutoFill tips, if you will). When you release the mouse button after extending the range with the fill handle, Excel either creates a series in all of the cells that you select or copies the entire range with the initial value. To the right of the last entry in the filled or copied series, Excel also displays a drop-down button that contains a shortcut menu of options. You can use this shortcut menu to override Excel's default filling or copying. For example, when you use the fill handle, Excel copies an initial value into a range of cells. But, if you want a sequential series, you could do this by selecting the Fill Series command on the AutoFill Options shortcut menu.

In Figures 2-11 and 2-12, I illustrate how to use AutoFill to enter a row of months, starting with January in cell B2 and ending with June in cell G2. To do this, you simply enter **January** in cell B2 and then position the mouse pointer on the fill handle in the lower-right corner of this cell before you drag through to cell G2 on the right (as shown in Figure 2-11). When you release the mouse button, Excel fills in the names of the rest of the months (February through June) in the selected cells (as shown in Figure 2-12). Excel keeps the cells with the series of months selected, giving you another chance to modify the series. (If you went too far, you can drag the fill handle to the left to cut back on the list of months; if you didn't go far enough, you can drag it to the right to extend the list of months further.)

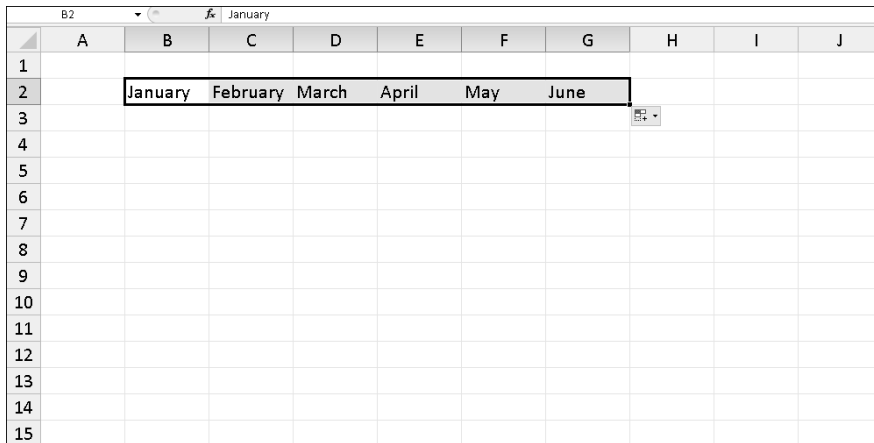
Also, you can use the options on the AutoFill Options drop-down menu (opened by clicking the drop-down button that appears on the fill handle to the right of June) to override the series created by default. To have Excel copy January into each of the selected cells, choose Copy Cells on this menu. To have the program fill the selected cells with the formatting used in cell B2 (in this case, the cell has had bold applied to it — see Chapter 3 for details on formatting cells), you select Fill Formatting Only on this menu. To have Excel fill in the series of months in the selected cells without copying the formatting used in cell B2, you select the Fill without Formatting command from this shortcut menu.

Figure 2-11:

To enter a series of months, enter the first month and then drag the Fill handle in a direction to add sequential months.

**Figure 2-12:**

Release the mouse button, and Excel fills the cell selection with the missing months.



See Table 2-3 in the following section to see some of the different initial values that AutoFill can use and the types of series that Excel can create from them.

Working with a spaced series

AutoFill uses the initial value that you select (date, time, day, year, and so on) to design the series. All the sample series I show in Table 2-3 change by a factor of one (one day, one month, or one number). You can tell AutoFill to create a series that changes by some other value: Enter two sample values in neighboring cells that describe the amount of change you want between each value in the series. Make these two values the initial selection that you extend with the fill handle.

For example, to start a series with Saturday and enter every other day across a row, enter **Saturday** in the first cell and **Monday** in the cell next door. After selecting both cells, drag the fill handle across the cells to the right as far as you need to fill out a series based on these two initial values. When you release the mouse button, Excel follows the example set in the first two cells by entering every other day (Wednesday to the right of Monday, Friday to the right of Wednesday, and so on).

Table 2-3	Samples of Series You Can Create with AutoFill
<i>Value Entered in First Cell</i>	<i>Extended Series Created by AutoFill in the Next Three Cells</i>
June	July, August, September
Jun	Jul, Aug, Sep
Tuesday	Wednesday, Thursday, Friday
Tue	Wed, Thu, Fri
4/1/99	4/2/99, 4/3/99, 4/4/99
Jan-00	Feb-00, Mar-00, Apr-00
15-Feb	16-Feb, 17-Feb, 18-Feb
10:00 PM	11:00 PM, 12:00 AM, 1:00 AM
8:01	9:01, 10:01, 11:01
Quarter 1	Quarter 2, Quarter 3, Quarter 4
Qtr2	Qtr3, Qtr4, Qtr1
Q3	Q4, Q1, Q2
Product 1	Product 2, Product 3, Product 4

Copying with AutoFill

You can use AutoFill to copy a text entry throughout a cell range (rather than fill in a series of related entries). To copy a text entry to a cell range, hold down the Ctrl key while you click and drag the Fill handle. When you hold down the Ctrl key while you click the fill handle, a plus sign appears to the right of the Fill handle — your sign that AutoFill will *copy* the entry in the active cell instead of creating a series using it. You can also tell because the entry that appears as the AutoFill tip next to the mouse pointer while you drag contains the same text as the original cell. If you decide after copying an initial label or value to a range that you should have used it to fill in a series, click the drop-down button that appears on the fill handle at the cell with the last copied entry and then select the Fill Series command on the AutoFill Options shortcut menu that appears.



Although holding down Ctrl while you drag the fill handle copies a text entry, just the opposite is true when it comes to values! Suppose that you enter the number 17 in a cell and then drag the fill handle across the row — Excel just copies the number 17 in all the cells that you select. If, however, you hold down Ctrl while you drag the fill handle, Excel then fills out the series (17, 18, 19, and so on). If you forget and create a series of numbers when you only need the value copied, rectify this situation by selecting the Copy Cells command on the AutoFill Options shortcut menu.

Creating custom lists for AutoFill

In addition to varying the increment in a series created with AutoFill, you can also create your own custom series. For example, say your company has offices in the following locations and you get tired of typing the sequence in each new spreadsheet that requires them:

- ✓ New York
- ✓ Chicago
- ✓ Atlanta
- ✓ Seattle
- ✓ San Francisco
- ✓ San Diego

After creating a custom list with these locations, you can enter the entire sequence of cities simply by entering New York in the first cell and then dragging the Fill handle to the blank cells where the rest of the companies should appear.

To create this kind of custom series, follow these steps:

- 1. Choose File⇨Options⇨Advanced or press Alt+F1A and then click the Edit Custom Lists button in the General section to open the Options dialog box (as shown in Figure 2-13).**

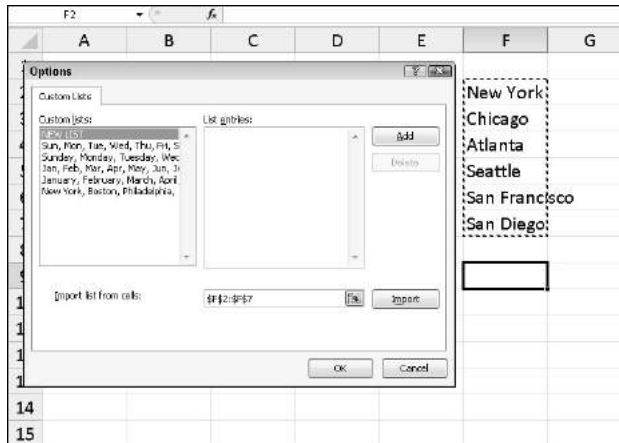
If you've already gone to the time and trouble of typing the custom list in a range of cells, go to Step 2. If you haven't yet typed the series in an open worksheet, go to Step 5.

- 2. Click inside the Import List from Cells text box and then click the Collapse Dialog Box button (the one with the picture of the tiny grid to the right of the Import List from Cells text box) so that you can see your list and drag through the range of cells to select them (see Chapter 3 for details).**

3. After selecting the cells in the worksheet, click the Expand Dialog Box button.

This button automatically replaces the Collapse Dialog Box button.

Figure 2-13:
Creating a custom company location list from a range of existing cell entries.



4. Click the Import button to copy this list into the List Entries list box.

Skip to Step 7.

5. Click inside the List Entries list box and then type each entry (in the desired order), being sure to press Enter after typing each one.

When all the entries in the custom list appear in the List Entries list box in the order you want them, proceed to Step 6.

6. Click the Add button to add the list of entries to the Custom Lists list box.

Finish creating all the custom lists you need, using the preceding steps. When you're done, move to Step 7.

7. Click OK twice, the first time to close the Options dialog box and the second to close the Excel Options dialog box and return to the current worksheet in the active workbook.

After adding a custom list to Excel, from then on you need only enter the first entry in a cell and then use the fill handle to extend it to the cells below or to the right.

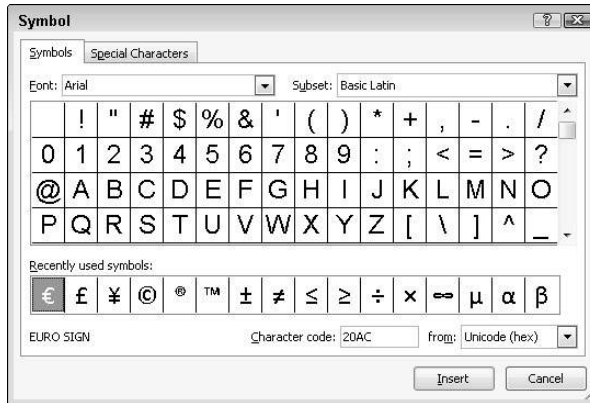


If you don't even want to bother with typing the first entry, use the AutoCorrect feature — refer to the section “You really AutoCorrect that for me,” earlier in this chapter — to create an entry that will fill in as soon as you type your favorite acronym for it (such as *ny* for New York).

Inserting special symbols

Excel makes it easy to enter special symbols, such as foreign currency indicators, and special characters, such as the trademark and copyright symbols, into your cell entries. To add a special symbol or character to a cell entry you're making or editing, click **Insert**→**Symbol** on the Ribbon or press **Alt+NU** to open the Symbol dialog box (similar to the one shown in Figure 2-14).

Figure 2-14:
Use the Symbol dialog box to insert special symbols and characters into your cell entries.



The Symbol dialog box contains two tabs: Symbols and Special Characters. To insert a mathematical or foreign currency symbol on the Symbols tab, click its symbol in the list box and then click the Insert button. (You can also do this by double-clicking the symbol.) To insert characters, such as foreign language or accented characters from other character sets, click the Subset drop-down button, click the name of the set in the drop-down list, and then click the desired characters in the list box. You can also insert commonly used currency and mathematical symbols, such as the pound or plus-or-minus symbol, by clicking them in the Recently Used Symbols section at the bottom of this tab.

To insert special characters, such as the registered trademark, paragraph symbol, and ellipsis, click the Special Characters tab of the Symbol dialog box, locate the symbol in the scrolling list, click it, and then click the Insert button. (You can insert one of these special characters by double-clicking it also.)

When you finish inserting special symbols and characters, close the Symbol dialog box by clicking its Close button in its upper-right corner.

Entries all around the block

When you want to enter a table of information in a new worksheet, you can simplify the job of entering the data if you select all the empty cells in which you want to make entries before you begin entering any information. Just position the cell pointer in the first cell of what is to become the data table and then select all the cells in the subsequent columns and rows. (For information on the ways to select a range of cells, see Chapter 3.) After you select the block of cells, you can begin entering the first entry.

When you select a block of cells (also known as a *range*) before you enter information, Excel restricts data entry to that range as follows:

- ✔ The program automatically advances the cell pointer to the next cell in the range when you click the Enter button or press Enter to complete each cell entry.
- ✔ In a cell range that contains several different rows and columns, Excel advances the cell pointer down each row of the column while you make your entries. When the cell pointer reaches the cell in the last row of the column, the cell pointer advances to the first selected row in the next column to the right. If the cell range uses only one row, Excel advances the cell pointer from left to right across the row.
- ✔ When you finish entering information in the last cell in the selected range, Excel positions the cell pointer in the first cell of the now-completed data table. To deselect the cell range, click the mouse pointer on one of the cells in the worksheet (inside or outside the selected range — it doesn't matter) or press one of the arrow keys.



Be sure that you don't press one of the arrow keys to complete a cell entry within a preselected cell range instead of clicking the Enter button or pressing Enter. Pressing an arrow key deselects the range of cells when Excel moves the cell pointer. To move the cell pointer around a cell range without deselecting the range, try these methods:

- ✔ Press Enter to advance to the next cell down each row and then across each column in the range. Press Shift+Enter to move up to the previous cell.
- ✔ Press Tab to advance to the next cell in the column on the right and then down each row of the range. Press Shift+Tab to move left to the previous cell.
- ✔ Press Ctrl+. (period) to move from one corner of the range to another.

Data entry express

You can save a lot of time and energy when you want the same entry (text, value, or formula) to appear in many cells of the worksheet; you can enter the information in all the cells in one operation. You first select the cell ranges to hold the information. (Excel lets you select more than one cell range for this kind of thing — see Chapter 3 for details.) Then you construct the entry on the formula bar and press Ctrl+Enter to put the entry into all the selected ranges.



The key to making this operation a success is to hold the Ctrl key while you press Enter so that Excel inserts the entry on the formula bar into all the selected cells. If you forget to hold Ctrl and you just press Enter, Excel places the entry in the first cell only of the selected cell range.

You can also speed up data entry in a list that includes formulas by making sure that the Extend Data Range Formats and Formulas check box is selected in the Editing Options section of the Advanced tab in the Excel Options dialog box. (Choose File→Options→Advanced or press Alt+F1A.) When this check box is selected, Excel automatically formats new data that you type in the last row of a list to match that of like data in earlier rows and copies down formulas that appear in the preceding rows. Note, however, that for this new feature to kick in, you must manually enter the formulas and format the data entries in at least three rows preceding the new row.

How to Make Your Formulas Function Even Better

Earlier in this chapter, I show you how to create formulas that perform a series of simple mathematical operations, such as addition, subtraction, multiplication, and division. (See the section “Fabricating those fabulous formulas!”) Instead of creating complex formulas from scratch out of an intricate combination of these operations, you can find an Excel function to get the job done.

A *function* is a predefined formula that performs a particular type of computation. All you have to do to use a function is supply the values that the function uses when performing its calculations. (In the parlance of the Spreadsheet Guru, such values are the *arguments of the function*.) As with simple formulas, you can enter the arguments for most functions either as a numerical value (for example, **22** or **-4.56**) or, as is more common, as a cell reference (**B10**) or as a cell range (**C3:F3**).

Just as with a formula you build yourself, each function you use must start with an equal sign (=) so that Excel knows to enter the function as a formula rather than as text. Following the equal sign, you enter the name of the function (in uppercase or lowercase — it doesn't matter, as long as you spell the name correctly). Following the name of the function, you enter the arguments required to perform the calculations. All function arguments are enclosed in a pair of parentheses.



If you type the function directly in a cell, remember not to insert spaces between the equal sign, function name, and the arguments enclosed in parentheses. Some functions use more than one value when performing their designated calculations. When this is the case, you separate each function with a comma (not a space).

After you type the equal sign and begin typing the first few letters of the name of the function you want to use, a drop-down list showing all the functions that begin with the letters you've typed appears immediately beneath the cell. When you see the name of the function you want to use on this list, double-click it and Excel will finish entering the function name in the cell and on the Formula bar as well as add the left parenthesis that marks the beginning of the arguments for the function.

Excel then displays all the arguments that the function takes beneath the cell and you can indicate any cell or cell range that you want to use as the first argument by either pointing to it or typing its cell or range references. When the function uses more than one argument, you can point to the cells or cell ranges or enter the addresses for the second argument right after you enter a comma (,) to complete the first argument.

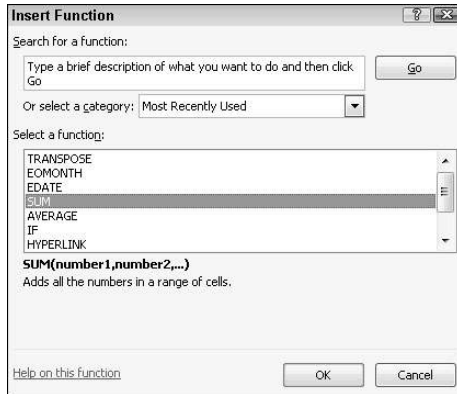
After you finish entering the last argument, you need to close off the function by typing a right parenthesis to mark the end of the argument list. The display of the function name along with its arguments that appeared beneath the cell when you first selected the function from the drop-down list then disappears. Click the Enter button or press Enter (or the appropriate arrow key) to then insert the function into the cell and have Excel calculate the answer.

Inserting a function into a formula with the Insert Function button

Although you can enter a function by typing it directly in a cell, Excel provides an Insert Function button on the Formula bar you can use to select any of Excel's functions. When you click this button, Excel opens the Insert Function dialog box (shown in Figure 2-15) where you can select the function you want to use. After you select your function, Excel opens the Function Arguments dialog box. In this dialog box, you can specify the function arguments. The real boon comes when you're fooling with an unfamiliar function or one that's kind of complex (some of these puppies can be hairy). You

can get loads of help in completing the argument text boxes in the Function Arguments dialog box by clicking the Help on This Function link in the lower-left corner.

Figure 2-15:
Select the function you want to use in the Insert Function dialog box.



The Insert Function dialog box contains three boxes: a Search for a Function text box, an Or Select a Category drop-down list box, and a Select a Function list box. When you open the Insert Function dialog box, Excel automatically selects Most Recently Used as the category in the Select a Category drop-down list box and displays the functions you usually use in the Select a Function list box.

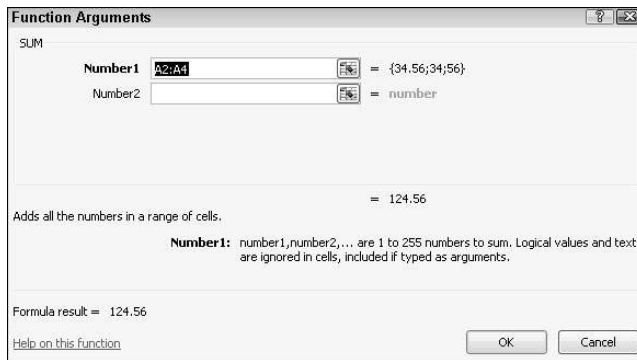
If your function isn't among the most recently used, you must then select the appropriate category of your function in the Select a Category drop-down list box. If you don't know the category, you must search for the function by typing a description of its purpose in the Search for a Function text box and then press Enter or click the Go button. For example, to locate all the Excel functions that total values, you enter **total** in the Search for Function list box and click the Go button. Excel then displays its list of recommended functions for calculating totals in the Select a Function list box. You can peruse the recommended functions by selecting each one. While you select each function in this list, the Insert Function dialog box shows you the required arguments followed by a description, at the bottom of the dialog box, of what the function does.

After you locate and select the function that you want to use, click the OK button to insert the function into the current cell and open the Function Arguments dialog box. This dialog box displays the required arguments for the function along with any that are optional. For example, suppose that you select the SUM function (the crown jewel of the Most Recently Used function category) in the Select a Function list box and then click OK. As soon as you do, the program inserts

```
SUM ( )
```

in the current cell and on the Formula bar (following the equal sign), and the Function Arguments dialog box showing the SUM arguments appears on the screen (as shown in Figure 2-16). This is where you add the arguments for the SUM function.

Figure 2-16: Specify the arguments to use in the selected function in the Function Arguments dialog box.



As shown in Figure 2-16, you can sum up to 255 numbers in the Function Arguments dialog box. What's not obvious, however (there's always some trick, huh?), is that these numbers don't have to be in single cells. In fact, most of the time you'll be selecting a whole slew of numbers in nearby cells (in a multiple cell selection — that range thing) that you want to total.

To select your first number argument in the dialog box, you click the cell (or drag through the block of cells) in the worksheet while the insertion point is in the Number1 text box. Excel then displays the cell address (or range address) in the Number1 text box while, at the same time, showing the value in the cell (or values, if you select a bunch of cells) in the box to the right. Excel displays the total near the bottom of the Function Arguments dialog box after the words *Formula result*=.

When selecting cells, you can minimize this arguments dialog box to just the contents of the Number1 text box by dragging the cell pointer through the cells to sum in the worksheet. After you minimize the arguments dialog box while selecting the cells for the first argument, you can then expand it again by releasing the mouse button.

You can also reduce the dialog box to the Number1 argument text box by clicking the Minimize Dialog Box button on the right of the text box, selecting the cells, and then clicking the Maximize Dialog Box button (the only button displayed on the far right) or by pressing the Esc key. Instead of minimizing the dialog box, you can also temporarily move it out of the way by clicking on any part and then dragging the dialog box to its new destination on the screen.

If you're adding more than one cell (or bunch of cells) in a worksheet, press the Tab key or click the Number2 text box to move the insertion point to that text box. (Excel responds by extending the argument list with a Number3 text box.) Here is where you specify the second cell (or cell range) to add to the one now showing in the Number1 text box. After you click the cell or drag through the second cell range, the program displays the cell address(es), the numbers in the cell(s) to the right, and the running total near the bottom of the Function Arguments dialog box after *Formula result=* (as shown in Figure 2-16). You can minimize the entire Function Arguments dialog box down to just the contents of the argument text box you're dealing with (Number2, Number3, and so on) by clicking its particular Minimize Dialog Box button if the dialog box obscures the cells that you need to select.

When you finish pointing out the cells or bunch of cells to sum, click the OK button to close the Function Arguments dialog box and put the SUM function in the current cell.

Editing a function with the Insert Function button

You can also use the Insert Function button to edit formulas that contain functions right from the Formula bar. Select the cell with the formula and function to edit before you click the Insert Function button (the one sporting the *fx* that appears immediately in front of the current cell entry on the Formula bar).

As soon as you click the Insert Function button, Excel opens the Function Arguments dialog box where you can edit its arguments. To edit just the arguments of a function, select the cell references in the appropriate argument's text box (marked Number1, Number2, Number3, and so on) and then make whatever changes are required to the cell addresses or select a new range of cells.

Excel automatically adds any cell or cell range that you highlight in the worksheet to the current argument. If you want to replace the current argument, you need to highlight it and remove its cell addresses by pressing the Delete key before you highlight the new cell or cell range to use as the argument. (Remember that you can always minimize this dialog box or move it to a new location if it obscures the cells you need to select.)

When you finish editing the function, press Enter or click the OK button in the Function Arguments dialog box to put it away and update the formula in the worksheet.

I'd be totally lost without AutoSum

Before leaving this fascinating discussion on entering functions, I want you to get to the AutoSum tool in the Editing group on the Home tab of the Ribbon.

Look for the Greek sigma (Σ) symbol. This little tool is worth its weight in gold. In addition to entering the SUM, AVERAGE, COUNT, MAX, or MIN functions, it also selects the most likely range of cells in the current column or row that you want to use as the function's argument and then automatically enters them as the function's argument. Nine times out of ten, Excel selects (with the *marquee* or moving dotted line) the correct cell range to total, average, count, and so forth. For that tenth case, you can manually correct the range by simply dragging the cell pointer through the block of cells to sum.

Simply click the AutoSum button on the Home tab when you want to insert the SUM function into the current cell. If you want to use this button to insert another function, such as AVERAGE, COUNT, MAX, or MIN, you need to click its drop-down button and select the name of the desired function on its pop-up menu (click Count Numbers on the menu to insert the COUNT function). If you select the More Functions command on this menu, Excel opens the Insert Function dialog box as though you had clicked the *fx* button on the Formula bar.

In Figure 2-17, check out how to use the AutoSum tool to total the sales of Jack Sprat Diet Centers in row 3. Position the cell pointer in cell E3 where the first-quarter total is to appear and then click the AutoSum tool. Excel inserts SUM (equal sign and all) onto the Formula bar; places a marquee around the cells B3, C3, and D3; and uses the cell range B3 : D3 as the argument of the SUM function.

Figure 2-17:
To total Jack Sprat Diet Centers first quarter sales for row 3, click the AutoSum button in cell E3 and press Enter.

		SUM					
		X ✓ fx =SUM(B3:D3)					
	A	B	C	D	E	F	G
1	Mother Goose Enterprises - 2010 Sales						
2		Jan	Feb	Mar	Qtr 1		
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	=SUM(B3:D3)		
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84			
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28			
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99			
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75			
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13			
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24			
10		Total					
11							
12							
13							
14							
15							

Now look at the worksheet after you insert the function in cell E3 (see Figure 2-18). The calculated total appears in cell E3 while the following `SUM` function formula appears in the Formula bar:

```
=SUM(B3:D3)
```

Figure 2-18:
The worksheet with the first quarter totals calculated with AutoSum.

	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2	
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84		
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28		
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99		
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75		
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13		
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24		
10	Total					
11						
12						
13						
14						
15						

After entering the function to total the sales of Jack Sprat Diet Centers, you can copy this formula to total sales for the rest of the companies by dragging the fill handle down column E until the cell range E3:E10 is highlighted.

Look at Figure 2-19 to see how you can use the AutoSum tool to total the January sales for all the Mother Goose Enterprises in column B. Position the cell pointer in cell B10 where you want the total to appear. Click the AutoSum tool, and Excel places the marquee around cells B3 through B9 and correctly enters the cell range `B3:B9` as the argument of the `SUM` function.

Figure 2-19:
Click the AutoSum button in cell B10 and press Enter to total the January sales for all companies in column B.

	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2	
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2	
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9	
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99	101069.8	
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6	
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2	
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1	
10	Total	=SUM(B3:B9)				
11		SUM(number1, [number2], ...)				
12						
13						
14						
15						

In Figure 2-20, you see the worksheet after inserting the function in cell B10 and using the AutoFill feature to copy the formula to cells C10 and D10 to the right. (To use AutoFill, drag the fill handle through the cells to the right until you reach cell D10. Release the mouse button.)

Figure 2-20:
The worksheet after copying the SUM function formulas using the fill handle.

B10		fx =SUM(B3:B9)				
	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2	
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2	
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9	
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99	101069.8	
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6	
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2	
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1	
10	Total	379320.2	509019.5	222043.3	1110383	
11						
12						
13						
14						
15						

Making Sure That the Data Is Safe and Sound

All the work you do in any of the worksheets in your workbook is at risk until you save the workbook as a disk file, normally on your computer's hard drive. Should you lose power or should your computer crash for any reason before you save the workbook, you're out of luck. You have to re-create each keystroke — a painful task, made all the worse because it's so unnecessary. To avoid this unpleasantness altogether, adopt this motto: Save your work any time that you enter more information than you could possibly bear to lose.



To encourage frequent saving on your part, Excel even provides you with a Save button on the Quick Access toolbar (the one with the picture of a 3¼" floppy disk, the very first on the toolbar). You don't even have to take the time and trouble to choose the Save command from the File pull-down menu (opened by choosing File) or even press Ctrl+S; you can simply click this tool whenever you want to save new work on disk.

When you click the Save button, press Ctrl+S, or choose File→Save for the first time, Excel displays the Save As dialog box. Use this dialog box to replace the temporary document name (Book1, Book2, and so forth) with a more descriptive filename in the File Name text box, select a new file format in the Save As Type drop-down list box, and select a new drive and folder before you save the workbook as a disk file.

When you finish making changes in the Save As dialog box, click the Save button or press Enter to have Excel 2010 save your work. When Excel saves your workbook file, the program saves all the information in every worksheet in your workbook (including the last position of the cell cursor) in the designated folder and drive.

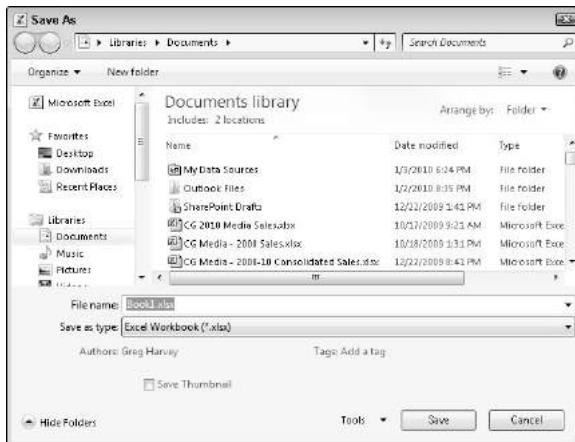


You don't have to fool with the Save As dialog box again unless you want to rename the workbook or save a copy of it in a different folder. If you want to do these things, you must choose File→Save As or press Alt+FA to choose the Save As command rather than clicking the Save button on the Quick Access toolbar or pressing Ctrl+S.

The Save As dialog box in Windows 7 and Windows Vista

Figure 2-21 shows you the Save As dialog box as it appears in Excel 2010 when running the program under Windows 7. Here, you can replace the temporary filename (Book1, Book2, and so on) with a more descriptive name by clicking the File Name text box and typing in the new name (up to 255 characters total, including spaces).

Figure 2-21: The Save As dialog box enables you to select the filename and folder for the new workbook file as well as add tags to it.



To select a new folder in which to save the new workbook file, follow these steps:

1. **In the Navigation Pane, click the name of the folder in the Favorites, Libraries, Computer, or Network section in which you want to save the workbook file.**

2. To save the workbook file within a subfolder of one of the folders now displayed in the main pane of the Save As dialog box, double-click its folder icon to open it up.
3. (Optional) If you want to save the workbook file inside a new subfolder within the folder currently open in the Save As dialog box, click the New Folder button on the toolbar, replace the suggested New Folder name by typing the actual name of the folder, and then press Enter.
4. Click the Save button to save the file in the selected folder.



When the Save As dialog box is expanded by clicking the Browse Folders button, you can modify the authors or add tags to the new workbook file by clicking the Add an Author or Add a Tag text boxes. You can then use this information later when searching for the workbook. (See Chapter 4 for details on searching.)

The Save As dialog box in Windows XP

The Windows XP version of the Save As dialog box contains a bunch of large buttons that appear on the left side of the dialog box: My Recent Documents, Desktop, My Documents, My Computer, and My Network Places. Use these buttons to select the following folders in which to save your new workbook file:

- ✓ Click the My Recent Documents button to save your workbook in the Recent folder. The Recent folder resides in this hierarchy: Windows folder (on your hard drive)\Application Data folder\Microsoft folder\Office folder\Recent folder.
- ✓ Click the Desktop button to save your workbook on your computer's desktop.
- ✓ Click the My Documents button to save your workbook in the My Documents folder.
- ✓ Click the My Computer button to save your workbook on one of the disks on your computer or in your own or a shared documents folder on your hard drive.
- ✓ Click the My Network Places button to save your workbook in one of the folders on your company's network.



To save your workbook in a new subfolder within the folder open in the Save As dialog box, click the Create New Folder button on the toolbar (or press Alt+F) and then type the name for the folder in the New Folder dialog box before you click OK.

Changing the default file location

Whenever you open the Save As dialog box to save a new workbook file, Excel 2010 automatically selects the folder listed in the Default File Location text box on the Save tab of the Excel Options dialog box (File⇨Options⇨Save or Alt+FIS).

When you first start using Excel, the default folder is either the My Documents (Windows XP) or the Documents folder (Windows 7 and Windows Vista) under your user name on your hard drive. For example, the directory path of the default folder where Excel 2010 automatically saves new workbook files on my computer running Windows XP is

```
C:\Documents and Settings\Greg\My Documents
```

However, the directory path of the default folder where Excel 2010 automatically saves new workbook files on my other computer running Windows 7 is

```
C:\Users\Greg\Documents
```

The very generic My Documents or Documents folder may not be the places on your hard drive where you want all the new workbooks you create automatically saved. To change the default file location to another folder on your computer, follow these steps:

- 1. Choose File⇨Options⇨Save or press Alt+FIS to open the Save tab of the Excel Options dialog box.**

The Default File Location text box displays the directory path to the current default folder.

- 2. Click the Default File Location text box.**

To edit part of the path (such as the My Documents or Documents folder name after your user name), click the mouse pointer at that place in the path to set the insertion point.

- 3. Edit the existing path or replace it with the path to another folder in which you want all future workbooks to save to automatically.**
- 4. Click OK to close the Excel Options dialog box.**

The difference between the XLSX and XLS file format

Excel 2010 supports the use of the XML-based file format first introduced in Excel 2007 (which Microsoft officially calls the Microsoft Office Open XML format). This default file format is touted as being more efficient in saving

data resulting in smaller file size and offering superior integration with external data sources (especially, when these resources are Web-based ones supporting XML files). This XML-based file format carries the filename extension `.xlsx` and is the file format in which Excel automatically saves any new workbook you create.



The only problem with this newfangled XML-based file format is that it can't be opened by earlier Excel versions (before Excel 2007). Therefore, if someone who needs to work with the workbook you've just created isn't using Excel 2007 or hasn't yet upgraded to Excel 2010, you need to save the new workbook in the earlier file format used in Excel versions 97 through 2003 with the old `.xls` filename extension.

To do this, click the Save As Type drop-down button in the Save As dialog box and then click Excel 97-2003 Workbook (*.xls) on the drop-down menu. (If you work in an office where all workbooks must be backwardly compatible with earlier versions, see “Dealing with the new Excel file formats” in Chapter 1 for a tip on making the Excel 97-2003 workbook file format the default format for Excel 2010.)



Filename extensions, such as `.xlsx` and `.xls`, do not appear as part of the filename (even though they are appended) in the File Name text box in the Excel Save As dialog box unless you've specifically changed Windows' folder options to show them. To make this change, open the Folder Options dialog box in Windows Explorer and then deselect the Hide Extensions for Known File Types check box on the View tab. To open the Folder Options dialog box, select Tools → Options on the Explorer window's pull-down menus in Windows XP or click the Organize button and then select Folder and Search Options on its drop-down menu in Windows 7 and Windows Vista.



Excel 2010 also supports a special binary file format called Excel Binary Workbook that carries the `.xlsb` filename extension. Select this binary format for huge spreadsheets that you create that have to be compatible with earlier versions of Excel.

Saving the Workbook as a PDF File

The PDF (Portable Document File) file format developed by Adobe Systems Incorporated enables people to open up and print documents without access to the original programs with which the documents were created.

Excel 2010 enables you to save your workbook files directly in this special PDF file format. You can readily share your Excel 2010 workbooks with users who don't have Excel installed on their computers by saving them as PDF files. All they need to open and print the PDF copy of the workbook file is the free Adobe Reader software (which they can download from the Adobe Web site at www.adobe.com).

To save your workbook as a PDF file, you simply select the PDF option on the Save as Type drop-down list in the Save As dialog box. Excel then adds PDF-specific options to the bottom of the Save As dialog box, with the Standard (Publishing Online and Printing) button under the Optimize For heading and the Open File after Publishing check box selected.

If you want to make the resulting PDF file as small as possible (because your worksheet is so large), click the Minimum Size (Publishing Online) button under the Optimize For heading. If you want to change which parts of the workbook are saved in the resulting PDF (Excel automatically saves all ranges in the active worksheet of the workbook), click the Options button directly beneath the Minimum Size (Publishing Online) option and make the appropriate changes in the Options dialog box before you click OK.

If you don't need to edit the filename (Excel automatically appends `.pdf` to the current filename) or the folder location in the Save As dialog box, simply click the Save button. Excel then saves a copy of the workbook in a PDF file format and, provided you don't deselect the Open File after Publishing check box, automatically opens the workbook for your inspection in Adobe Reader. After viewing the PDF version in Adobe Reader, you can then return to your worksheet in Excel by clicking Reader's Close button (or pressing `Alt+F4`).



If you create an Excel 2010 workbook that incorporates new features not supported in earlier versions of Excel, instead of saving the workbook as an `.xls` file, thereby losing all of its 2010 enhancements, consider saving it as a PDF file. That way, co-workers still using pre-2010 Excel versions can still access the data in all its glory via Adobe Reader.

Document Recovery to the Rescue

Excel 2010 offers a document recovery feature that can help you in the event of a computer crash because of a power failure or some sort of operating system freeze or shutdown. The AutoRecover feature saves your workbooks at regular intervals. In the event of a computer crash, Excel displays a Document Recovery task pane the next time you start Excel after rebooting the computer.



When you first start using Excel 2010, the AutoRecover feature is set to automatically save changes to your workbook (provided that the file has already been saved) every ten minutes. You can shorten or lengthen this interval as you see fit. Choose `File` → `Options` → `Save` or press `Alt+FIS` to open the Excel Options dialog box with the Save tab selected. Use the spinner buttons or enter a new automatic save interval into the text box marked Save AutoRecover Information Every 10 Minutes before clicking OK.

After re-launching Excel 2010 after a computer crash that prevents you from saving your workbook file, the program opens with the Document Recovery task pane on the left side of the screen. This Document Recovery task pane shows the available versions of the workbook files that were open at the time of the computer crash. The original version of the workbook file is identified, including when it was saved, as is the recovered version of the file (displaying an `.xlsb` file extension) and when it was saved.

To open the recovered version of a workbook (to see how much of the work it contains that was unsaved at the time of the crash), position the mouse pointer over the AutoRecover version, click its drop-down menu button, and then click Open. After you open the recovered version, you can then (if you choose) save its changes by clicking the Save button on the Quick Access toolbar or by choosing File→Save.

To save the recovered version of a workbook without bothering to first open it, place your mouse over the recovered version in the task pane, click its drop-down button, and then choose Save As. To abandon the recovered version permanently (leaving you with *only* the data in the original version), click the Close button at the bottom of the Document Recovery task pane. When you click the Close button, an alert dialog box appears, giving you the chance to retain the recovered versions of the file for later viewing. To retain the files for later viewing, select the Yes (I Want to View These Files Later) radio button before clicking OK. To retain only the original versions of the files shown in the task pane, select the No (Remove These Files. I Have Saved the Files I Need) radio button instead.



The AutoRecover features only work on Excel workbooks that you've saved at least one time (as explained in the earlier section "Making Sure That the Data Is Safe and Sound"). In other words, if you build a new workbook and don't bother to save and rename it prior to experiencing a computer crash, the AutoRecover feature will not bring back any part of it. For this reason, it is very important that you get into the habit of saving new workbooks with the Save button on the Quick Access toolbar very shortly after beginning to work on its worksheets. Or use the trusty keyboard shortcut Ctrl+S.

Part II

Editing without Tears

The 5th Wave

By Rich Tennant



"I've used several spreadsheet programs, but this is the best one for designing quilt patterns."

In this part . . .

The business world wouldn't be half-bad if it weren't for the fact that right around the time you master your job, somebody goes and changes it on you. When your life must always be flexible, changing gears and "going with the flow" can really grate on a person! The sad truth is that a big part of the work you do with Excel 2010 is changing the stuff you slaved so hard to enter into the spreadsheet in the first place.

In Part II, I break down this editing stuff into three phases: formatting the raw data; rearranging the formatted data or in some cases deleting it; and spitting out the final formatted and edited data in printed form. Take it from me, after you know your way around editing your spreadsheets (as presented in this part of the book), you're more than half-way home with Excel 2010.

Chapter 3

Making It All Look Pretty

In This Chapter

- ▶ Selecting the cells to format
 - ▶ Formatting data tables with the Format as Table command button
 - ▶ Using various number formats on cells containing values
 - ▶ Adjusting column width and row height in a worksheet
 - ▶ Hiding columns and rows in a worksheet
 - ▶ Formatting cell ranges from the Home tab of the Ribbon
 - ▶ Formatting cell ranges using Styles and the Format Painter
 - ▶ Formatting cells under certain conditions
-

In spreadsheet programs like Excel, you normally don't worry about how the stuff looks until after you enter all the data in the worksheets of your workbook and save it all safe and sound (see Chapters 1 and 2). Only then do you pretty up the information so that it's clearer and easy to read.

After you decide on the types of formatting that you want to apply to a portion of the worksheet, you can select all the cells to beautify and then click the appropriate tool or choose the menu command to apply those formats to the cells. However, before you discover all the fabulous formatting features you can use to dress up cells, you need to know how to pick the group of cells that you want to apply the formatting to — that is, *selecting the cells* or, alternately, *making a cell selection*.

Be aware, also, that entering data into a cell and formatting that data are two completely different things in Excel. Because they're separate, you can change the entry in a formatted cell, and new entries assume the cell's formatting. This enables you to format blank cells in a worksheet, knowing that when you get around to making entries in those cells, those entries automatically assume the formatting you assign to those cells.

Choosing a Select Group of Cells

Given the monotonously rectangular nature of the worksheet and its components, it shouldn't come as a surprise to find that all the cell selections you make in the worksheet have the same kind of cubist feel to them. After all, worksheets are just blocks of cells of varying numbers of columns and rows.

A *cell selection* (or *cell range*) is whatever collection of neighboring cells you choose to format or edit. The smallest possible cell selection in a worksheet is just one cell: the so-called *active cell*. The cell with the cell cursor is really just a single cell selection. The largest possible cell selection in a worksheet is all the cells in that worksheet (the whole enchilada, so to speak). Most of the cell selections you need for formatting a worksheet will probably fall somewhere in between, consisting of cells in several adjacent columns and rows.

Excel shows a cell selection in the worksheet by highlighting in color the entire block of cells within the extended cell cursor except for the active cell that keeps its original color. (Figure 3-1 shows several cell selections of different sizes and shapes.)

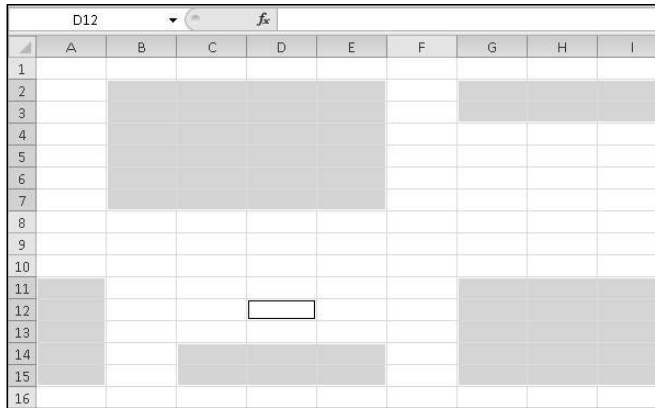


Figure 3-1:
Several cell
selections
of various
shapes and
sizes.

In Excel, you can select more than one cell range at a time (a phenomenon somewhat ingloriously called a *noncontiguous* or *nonadjacent selection*). In fact, although Figure 3-1 appears to contain several cell selections, it's really just one big, nonadjacent cell selection with cell D12 (the active one) as the cell that was selected last.

Point-and-click cell selections

The mouse is a natural for selecting a range of cells. Just position the mouse pointer (in its thick, white cross form) on the first cell and then click and drag in the direction that you want to extend the selection.

- ✓ To extend the cell selection to columns to the right, drag your mouse to the right, highlighting neighboring cells as you go.
- ✓ To extend the selection to rows to the bottom, drag your mouse down.
- ✓ To extend the selection down and to the right at the same time, drag your mouse diagonally toward the cell in the lower-right corner of the block you're highlighting.

Shifty cell selections

To speed up the old cell-selection procedure, you can use the Shift+click method, which goes as follows:

- 1. Click the first cell in the selection.**

This selects that cell.

- 2. Position the mouse pointer in the last cell in the selection.**

This is kitty-corner from the first cell in your selected rectangular block.

- 3. Press the Shift key and hold it down while you click the mouse button again.**

When you click the mouse button the second time, Excel selects all the cells in the columns and rows between the first cell and last cell.

The Shift key works with the mouse like an *extend* key to extend a selection from the first object you select through to, and including, the second object you select. See the section “Extend that cell selection,” later in this chapter. Using the Shift key enables you to select the first and last cells, as well as all the intervening cells in a worksheet or all the document names in a dialog list box.

If, when making a cell selection with the mouse, you notice that you include the wrong cells before you release the mouse button, you can deselect the cells and resize the selection by moving the pointer in the opposite direction. If you already released the mouse button, click the first cell in the highlighted range to select just that cell (and deselect all the others) and then start the whole selection process again.

Nonadjacent cell selections

To select a nonadjacent cell selection made up of more than one non-touching block of cells, drag through the first cell range and release the mouse button. Then hold down the Ctrl key while you click the first cell of the second range and drag the pointer through the cells in this range. As long as you hold down Ctrl while you select the subsequent ranges, Excel doesn't deselect any of the previously selected cell ranges.

The Ctrl key works with the mouse like an *add* key to include non-neighboring objects in Excel. See the section “Nonadjacent cell selections with the keyboard,” later in this chapter. By using the Ctrl key, you can add to the selection of cells in a worksheet or to the document names in a dialog list box without having to deselect those already selected.

Going for the “big” cell selections

You can select the cells in entire columns or rows or even all the cells in the worksheet by applying the following clicking-and-dragging techniques to the worksheet frame:

- ✓ To select every single cell in a particular column, click its column letter on the frame at the top of the worksheet document window.
- ✓ To select every cell in a particular row, click its row number on the frame at the left edge of the document window.
- ✓ To select a range of entire columns or rows, drag through the column letters or row numbers on the frame surrounding the workbook.
- ✓ To select more than entire columns or rows that are not right next to each other (that old noncontiguous stuff, again), press and hold down the Ctrl key while you click the column letters or row numbers of the columns and rows that you want to add to the selection.
- ✓ To select every cell in the worksheet, press Ctrl+A or click the Select All button, which is the button with the triangle pointing downward on the diagonal (reminding me of the corner of a dog-eared book page). It's in the upper-left corner of the workbook frame, formed by the intersection of the row with the column letters and the column with the row numbers.



Selecting the cells in a table of data, courtesy of AutoSelect

Excel provides a quick way (called AutoSelect) to select all the cells in a table of data entered as a solid block. To use AutoSelect, simply follow these steps:

1. Click the first cell of the table to select it.

This is the cell in the table's upper-left corner.

2. Hold down the Shift key while you double-click the right or bottom edge of the selected cell with the arrowhead mouse pointer. (See Figure 3-2.)

Figure 3-2:
Position the mouse pointer on the first cell's bottom edge to select all cells of the table's first column.

Jack Sprat Diet Centers					
A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales				
2		Jan	Feb	Mar	Qtr 1
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99	101069.8
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1
10	Total	379320.2	509019.5	222043.3	1110383
11					
12					
13					
14					
15					
16					

Double-clicking the bottom edge of the cell causes the cell selection to expand to the cell in the last row of the first column (as shown in Figure 3-3). If you double-click the right edge of the cell, the cell selection expands to the cell in the last column of the first row.

Figure 3-3:
Hold down Shift while you double-click the bottom edge of the first cell to extend the selection down the column.

Jack Sprat Diet Centers					
A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales				
2		Jan	Feb	Mar	Qtr 1
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99	101069.8
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1
10	Total	379320.2	509019.5	222043.3	1110383
11					
12					
13					
14					
15					
16					

- 3a. Double-click somewhere on the right edge of the cell selection (refer to Figure 3-3) if the cell selection now consists of the first column of the table.**

This selects all the remaining rows of the table of data (as shown in Figure 3-4).

- 3b. Double-click somewhere on the bottom edge of the current cell selection if the cell selection now consists of the first row of the table.**

This selects all the remaining rows in the table.

Figure 3-4:
Hold down
Shift as you
double-click
the right
edge of
the current
selection
to extend it
across the
rows of the
table.

Jack Sprat Diet Centers					
A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales				
2		Jan	Feb	Mar	Qtr 1
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9
6	Rub-a-Dub-Dub Tubs and Spas	1767.79	40635	42814.99	101069.8
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1
10	Total	379320.2	509019.5	222043.3	1110383
11					
12					
13					
14					
15					
16					



Although the preceding steps may lead you to believe that you have to select the first cell of the table when you use AutoSelect, you can actually select any of the cells in the four corners of the table. Then, when expanding the cell selection in the table with the Shift key depressed, you can choose whatever direction you like to either select the first or last row of the table or the first or last column. (Choose left, by clicking the left edge; right, by clicking the right edge; up, by clicking the top edge; or down, by clicking the bottom edge.) After expanding the cell selection to include either the first or last row or first or last column, you need to click whichever edge of that current cell selection that will expand it to include all the remaining table rows or columns.

Keyboard cell selections

If you're not keen on using the mouse, you can use the keyboard to select the cells you want. Sticking with the Shift+click method of selecting cells, the easiest way to select cells with the keyboard is to combine the Shift key with other keystrokes that move the cell cursor. (I list these keystrokes in Chapter 1.)

Start by positioning the cell cursor in the first cell of the selection and then holding the Shift key while you press the appropriate cell-pointer movement keys. When you hold the Shift key while you press direction keys — such as the arrow keys (↑, →, ↓, ←), PgUp, or PgDn — Excel anchors the selection on the current cell, moves the cell cursor, and highlights cells as it goes.



When making a cell selection this way, you can continue to alter the size and shape of the cell range with the cell-pointer movement keys as long as you don't release the Shift key. After you release the Shift key, pressing any of the cell-pointer movement keys immediately collapses the selection, reducing it to just the cell with the cell cursor.

Extend that cell selection

If holding the Shift key while you move the cell cursor is too tiring, you can place Excel in Extend mode by pressing (and promptly releasing) F8 before you press any cell-pointer movement key. Excel displays the Extend Selection indicator on the left side of the Status bar — when you see this, the program will select all the cells that you move the cell cursor through (just as though you were holding down the Shift key).

After you highlight all the cells you want in the cell range, press F8 again (or Esc) to turn off Extend mode. The Extend Selection indicator disappears from the status bar, and then you can once again move the cell cursor with the keyboard without highlighting everything in your path. In fact, when you first move the pointer, all previously selected cells are deselected.

AutoSelect keyboard style

For the keyboard equivalent of AutoSelect with the mouse (see the “Selecting the cells in a table of data, courtesy of AutoSelect” section), you combine the use of the F8 key (Extend key) or the Shift key with the Ctrl+arrow keys or End+arrow keys to zip the cell cursor from one end of a block to the other and merrily select all the cells in that path.

To select an entire table of data with a keyboard version of AutoSelect, follow these steps:

- 1. Position the cell cursor in the first cell.**
That’s the cell in the upper-left corner of the table.
- 2. Press F8 (or hold the Shift key) and then press Ctrl+→ to extend the cell selection to the cells in the columns on the right.**
- 3. Then press Ctrl+↓ to extend the selection to the cells in the rows below.**



The directions in the preceding steps are somewhat arbitrary — you can just as well press Ctrl+↓ before you press Ctrl+→. Just be sure (if you’re using the Shift key instead of F8) that you don’t let up on the Shift key until after you finish performing these two directional maneuvers. Also, if you press F8 to get the program into Extend mode, don’t forget to press this key again to get out of Extend mode after the table cells are all selected, or you’ll end up selecting cells that you don’t want included when you next move the cell cursor.

Nonadjacent cell selections with the keyboard

Selecting more than one cell range is a little more complicated with the keyboard than it is with the mouse. When using the keyboard, you alternate between *anchoring* the cell cursor and moving it to select the cell range and

unanchoring the cell cursor and repositioning it at the beginning of the next range. To unanchor the cell cursor so that you can move it into position for selecting another range, press Shift+F8. This puts you in Add to Selection mode, in which you can move to the first cell of the next range without selecting any more cells. Excel lets you know that the cell cursor is unanchored by displaying the Add to Selection indicator on the left side of the Status bar.

To select more than one cell range by using the keyboard, follow these general steps:

1. Move the cell cursor to the first cell of the first cell range that you want to select.

2. Press F8 to get into Extend Selection mode.

Move the cell cursor to select all the cells in the first cell range. Alternatively, hold the Shift key while you move the cell cursor.

3. Press Shift+F8 to switch from Extend Selection mode to Add to Selection mode.

The Add to Selection indicator appears in the Status bar.

4. Move the cell cursor to the first cell of the next nonadjacent range that you want to select.

5. Press F8 again to get back into Extend Selection mode and then move the cell cursor to select all the cells in this new range.

6. If you still have other nonadjacent ranges to select, repeat Steps 3, 4, and 5 until you select and add all the cell ranges that you want to use.

Cell selections à la Go To

If you want to select a large cell range that would take a long time to select by pressing various cell-pointer movement keys, use the Go To feature to extend the range to a far distant cell. All you gotta do is follow this pair of steps:

1. Position the cell cursor in the first cell of the range and then press F8 to anchor the cell cursor and get Excel into Extend Selection mode.

2. Press F5 or Ctrl+G to open the Go To dialog box, type the address of the last cell in the range (the cell kitty-corner from the first cell), and then click OK or press Enter.



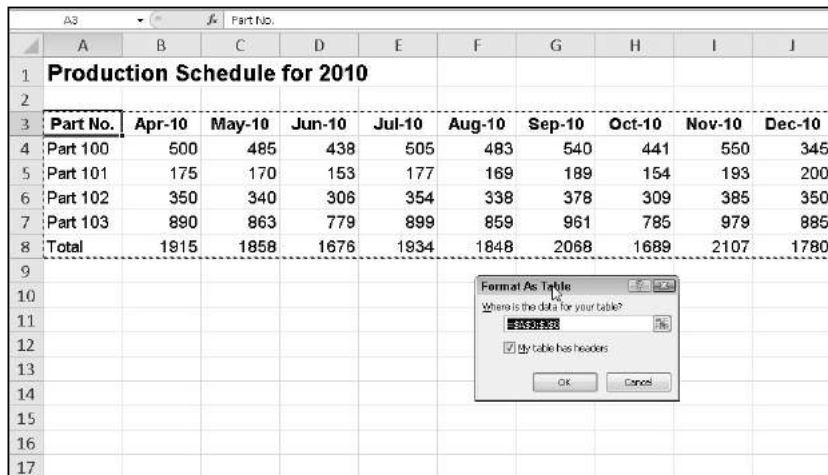
Because Excel is in Extend Selection mode at the time you use the Go To feature to jump to another cell, the program not only moves the cell cursor to the designated cell address but selects all the intervening cells as well. After selecting the range of cells with the Go To feature, don't forget to press F8 (the Extend Selection key) again to prevent the program from messing up your selection by adding more cells the next time you move the cell cursor.

Having Fun with the Format as Table Gallery

Here's a formatting technique that doesn't require you to do any prior cell selecting. (Kinda figures, doesn't it?) The Format as Table feature is so automatic that the cell cursor just has to be within the table of data prior to you clicking the Format as Table command button in the Styles group on the Home tab. Clicking the Format as Table command button opens its rather extensive Table gallery with the formatting thumbnails divided into three sections — Light, Medium, and Dark — each of which describes the intensity of the colors used by its various formats.

As soon as you click one of the table formatting thumbnails in this Table gallery, Excel makes its best guess as to the cell range of the data table to apply it to (indicated by the marquee around its perimeter) and the Format as Table dialog box, similar to the one shown in Figure 3-5, appears.

Figure 3-5: Selecting a format from the Table gallery and indicating its range in the Format as Table dialog box.



This dialog box contains a Where Is the Data for Your Table text box that shows the address of the cell range currently selected by the marquee and a My Table Has Headers check box.

If Excel does not correctly guess the range of the data table you want to format, drag through the cell range to adjust the marquee and the range address in the Where Is the Data for Your Table text box. If your data table

doesn't use column headers or, if the table has them, but you still don't want Excel to add Filter drop-down buttons to each column heading, deselect the My Table Has Headers check box before you click the OK button.



The table formats in the Table gallery are not available if you select multiple nonadjacent cells before you click the Format as Table command button on the Home tab.

After you click the OK button in the Format As Table dialog box, Excel applies the format of the thumbnail you clicked in the gallery to the data table. Additionally, the Design tab appears under the Table Tools contextual tab at the end of the Ribbon, as shown in Figure 3-6.

Part No.	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10
Part 100	500	485	438	505	483	540	441	550	345
Part 101	175	170	153	177	169	189	154	193	200
Part 102	350	340	306	354	338	378	309	385	350
Part 103	890	863	779	899	859	961	785	979	885
Total	1915	1858	1676	1934	1848	2068	1689	2107	1780

Figure 3-6: After you select a format from the Table gallery, the Design tab appears under the Table Tools contextual tab.



The Design tab enables you to use Live Preview to see how your table would appear. Simply position the mouse pointer over any of the format thumbnails in the Table Styles group to see the data in your table appear in that table format. Click the button with the triangle pointing downward to scroll up new rows of table formats in the Table Styles group and the button with the triangle pointing upward to scroll down rows without opening the Table gallery and possibly obscuring the actual data table in the Worksheet area. Click the More button (the one with the horizontal bar above the downward pointing triangle) to redisplay the Table gallery and then mouse over the thumbnails in the Light, Medium, and Dark sections to have Live Preview apply them to the table.

In addition to enabling you to select a new format from the Table gallery in the Table Styles group, the Design tab contains a Table Style Options group containing a bunch of check boxes that enable you to customize the look of the selected table format even further:

- ✓ **Header Row** to add special formatting and Filter buttons to each of the column headings in the first row of the table.
- ✓ **Total Row** to have Excel add a Total Row to the bottom of the table that displays the sums of each column that contains values. To apply another Statistical function to the values in a particular column, click the cell in that column's Total Row to display a drop-down list button and then select the function — Average, Count, Count Numbers, Max, Min, Sum, StdDev (Standard Deviation), or Var (Variance).
- ✓ **First Column** to have Excel display the row headings in the first column of the table in bold.
- ✓ **Last Column** to have Excel display the row headings in the last column of the table in bold.
- ✓ **Banded Rows** to have Excel apply shading to every other row in the table.
- ✓ **Banded Columns** to have Excel apply shading to every other column in the table.



Whenever you assign a format in the Table gallery to one of the data tables in your workbook, Excel automatically assigns that table a generic range name (Table1, Table2, and so on). You can use the Table Name text box in the Properties group on the Design tab to rename the data table by giving it a more descriptive range name. (See Chapter 6 for all you need to know about naming cell ranges.)



When you finish selecting and/or customizing the formatting of your data table, click a cell outside of the table to remove the Table Tools contextual tab (with its Design tab) from the Ribbon. If later, you decide that you want to further experiment with the table's formatting, click any of the table's cells to redisplay the Table Tools' Design tab at the end of the Ribbon.

Cell Formatting from the Home Tab

Some spreadsheet tables or ranges within them require a lighter touch than the Format as Table command button offers. For example, you may have a data table where the only emphasis you want to add is to make the column headings bold at the top of the table and to underline the row of totals at the bottom (done by drawing a borderline along the bottom of the cells).

The formatting buttons that appear in the Font, Alignment, and Number groups on the Home tab enable you to accomplish just this kind of targeted cell formatting. Figures 3-7, 3-8, and 3-9 identify all the formatting buttons in these three groups on the Home tab. See Table 3-1 for a complete rundown on how to use each of these formatting buttons.

Figure 3-7: The Home tab's Font group contains the tools you commonly need when modifying the appearance of the text in a cell range.

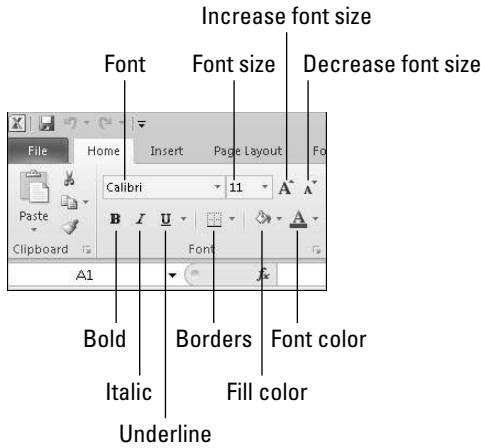


Figure 3-8: The Home tab's Alignment group contains the tools you commonly need when modifying the placement of the text in a cell range.

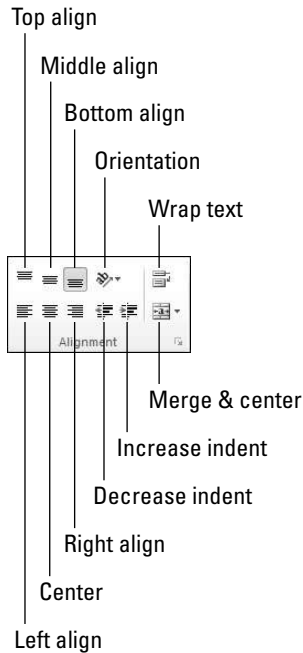


Figure 3-9:
The Home tab's Number group contains the tools you commonly need when modifying the number format of the values in a cell range.

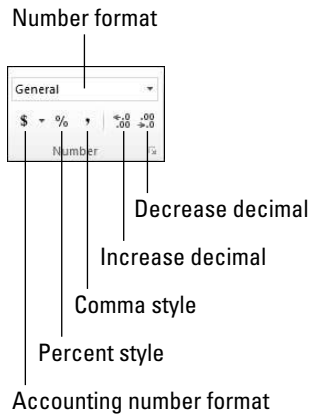


Table 3-1 Formatting Command Buttons in the Font, Alignment, and Number Groups on the Home Tab

<i>Group</i>	<i>Button Name</i>	<i>Function</i>
Font		
	Font	Displays a Font drop-down menu from which you can select a new font for your cell selection
	Font Size	Displays a Font Size drop-down menu from which you can select a new font size for your cell selection — click the Font Size text box and enter the desired point size if it doesn't appear on the drop-down menu
	Increase Font Size	Increases the size of the font in the cell selection by one point
	Decrease Font Size	Decreases the size of the font in the cell selection by one point
	Bold	Applies boldface to the entries in the cell selection
	Italic	Italicizes the entries in the cell selection
	Underline	Underlines the entries in the cell selection
	Borders	Displays a Borders drop-down menu from which you can select a border style for the cell selection

(continued)

Table 3-1 (continued)

Group	Button Name	Function
	Fill Color	Displays a Color drop-down palette from which you can select a new background color for the cell selection
	Font Color	Displays a Color drop-down palette from which you can select a new font color for the cell selection
Alignment		
	Align Left	Aligns all the entries in the cell selection with the left edge of their cells
	Center	Centers all the entries in the cell selection within their cells
	Align Right	Aligns all the entries in the cell selection with the right edge of their cells
	Decrease Indent	Decreases the margin between entries in the cell selection and their left cell borders by one tab stop
	Increase Indent	Increases the margin between the entries in the cell selection and their left cell borders by one tab stop
	Top Align	Aligns the entries in the cell selection with the top border of their cells
	Middle Align	Vertically centers the entries in the cell selection between the top and bottom borders of their cells
	Bottom Align	Aligns the entries in the cell selection with the bottom border of their cells
	Orientation	Displays a drop-down menu with options for changing the angle and direction of the entries in the cell selection
	Wrap Text	Wraps the entries in the cell selection that spill over their right borders onto multiple lines within the current column width
	Merge and Center	Merges the cell selection into a single cell and the centers the entry in the first cell between its new left and right border — click the Merge and Center drop-down button to display a menu of options that enable you to merge the cell selection into a single cell without centering the entries as well as to split up a merged cell back into its original individual cells

<i>Group</i>	<i>Button Name</i>	<i>Function</i>
Number		
	Number Format	Displays the number format applied to the active cell in the cell selection — click its drop-down button to display a menu showing the active cell in cell selection formatted with all of Excel's major number formats
	Accounting Number Format	Formats the cell selection using the Accounting number format that adds a dollar sign, uses commas to separate thousands, displays two decimal places, and encloses negative values in a closed pair of parentheses — click the Accounting Number Format's drop-down button to display a menu of other major Currency number formats from which you can choose
	Percent Style	Formats the cell selection using the Percentage number format that multiplies the values by 100 and adds a percent sign with no decimal places
	Comma Style	Formats the cell selection with the Comma Style number format that uses commas to separate thousands, displays two decimal places, and encloses negative values in a closed pair of parentheses
	Increase Decimal	Adds a decimal place to the values in the cell selection
	Decrease Decimal	Removes a decimal place from the values in the cell selection



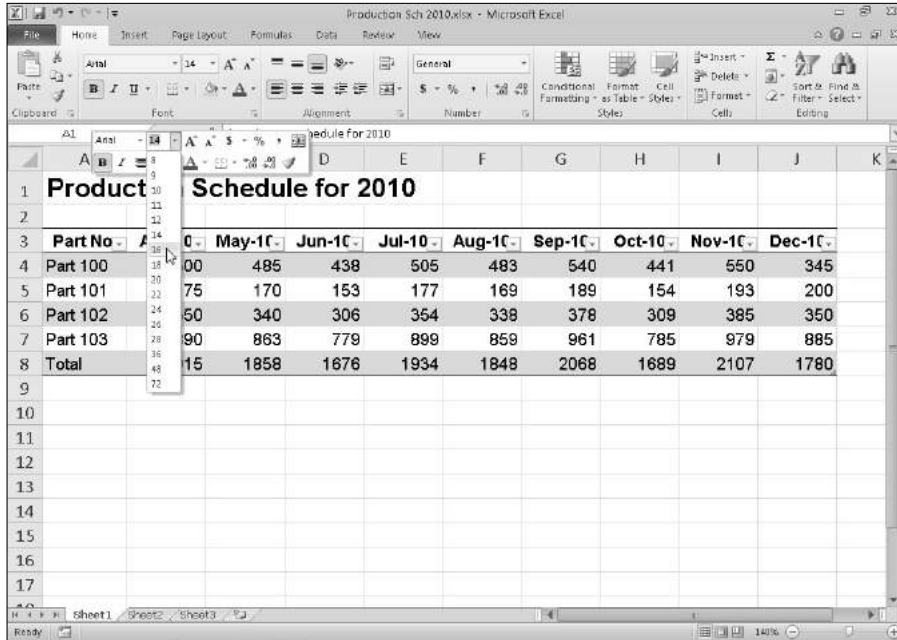
Don't forget about these shortcut keys for quickly adding or removing attributes from the entries in the cell selection: Ctrl+B for toggling on and off bold in the cell selection, Ctrl+I for toggling on and off italic, and Ctrl+U for toggling on and off underlining.

Formatting Cells Close to the Source with the Mini-Toolbar

Excel 2010 makes it easy to apply common formatting changes to a cell selection right within the Worksheet area thanks to its new mini-toolbar feature, nicknamed the mini-bar (makes me thirsty just thinking about it!).

To display the mini-bar, select the cells that need formatting and then right-click somewhere in the cell selection. The mini-toolbar then appears immediately above the cell selection (see Figure 3-10).

Figure 3-10: Use the buttons on the mini-toolbar to apply common formatting changes to the cell selection within the Worksheet area.



As you can see in this figure, the mini-toolbar contains most of the buttons from the Font group of the Home tab (with the exception of the Underline button). It also contains the Center and Merge & Center buttons from the Alignment group (see “Altering the Alignment” later in this chapter) and the Accounting Number Format, Percent Style, Comma Style, Increase Decimal, and Decrease Decimal buttons from the Number group (see “Getting comfortable with the number formats” later in this chapter). Simply click these buttons to apply their formatting to the current cell selection.

Additionally, the mini-bar contains the Format Painter button from the Clipboard group of the Home tab that you can use to copy the formatting in the active cell to a cell selection you make (see “Fooling Around with the Format Painter” later in this chapter for details).

Using the Format Cells Dialog Box

Although the command buttons in the Font, Alignment, and Number groups on the Home tab give you immediate access to the most commonly used

formatting commands, they do not represent all of Excel's formatting commands by any stretch of the imagination.

To have access to all the formatting commands, you need to open the Format Cells dialog box by doing any of the following:

- ✓ Click the More Number Formats option at the very bottom of the drop-down menu attached to the Number Format button
- ✓ Click the dialog box launcher in the lower right of the Number group
- ✓ Press Ctrl+1

The Format Cells dialog box that this command calls up contains six tabs: Number, Alignment, Font, Border, Fill, and Protection. In this chapter, I show you how to use them all except the Protection tab. For information on that tab, see Chapter 6.



The keystroke shortcut that opens the Format Cells dialog box — Ctrl+1 — is one worth knowing. Just press the Ctrl key plus the *number* 1 key, and not the *function key* F1.

Getting comfortable with the number formats

As I explain in Chapter 2, how you enter values into a worksheet determines the type of number format that they get. Here are some examples:

- ✓ If you enter a financial value complete with the dollar sign and two decimal places, Excel assigns a Currency number format to the cell along with the entry.
- ✓ If you enter a value representing a percentage as a whole number followed by the percent sign without any decimal places, Excel assigns the cell the Percentage number format that follows this pattern along with the entry.
- ✓ If you enter a date (dates are values, too) that follows one of the built-in Excel number formats, such as 11/06/02 or 06-Nov-02, the program assigns a Date number format that follows the pattern of the date along with a special value representing the date.

Although you can format values in this manner as you go along (which is necessary in the case of dates), you don't have to do it this way. You can always assign a number format to a group of values before or after you enter them.

Formatting numbers after you enter them is often the most efficient way to go because it's just a two-step procedure:

1. Select all the cells containing the values that need dressing up.
2. Select the number format that you want to use from the formatting command buttons on the Home tab or the options available on the Number tab in the Format Cells dialog box.



Even if you're a really, really good typist and prefer to enter each value exactly as you want it to appear in the worksheet, you still have to resort to using number formats to make the values that are calculated by formulas match the others you enter. This is because Excel applies a General number format (which the Format Cells dialog box defines: "General format cells have no specific number format.") to all the values it calculates as well as any you enter that don't exactly follow one of the other Excel number formats. The biggest problem with the General format is that it has the nasty habit of dropping all leading and trailing zeros from the entries. This makes it very hard to line up numbers in a column on their decimal points.

You can view this sad state of affairs in Figure 3-11, which is a sample worksheet with the first-quarter 2010 sales figures for Mother Goose Enterprises before any of the values have been formatted. Notice how the numbers in the monthly sales figures columns zig and zag because they don't align according to decimal place. This is the fault of Excel's General number format; the only cure is to format the values with a uniform number format.

	A	B	C	D	E	F	G
1	Mother Goose Enterprises - 2010 Sales						
2		Jan	Feb	Mar	Qtr 1		
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06	159488.2		
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84	127428.2		
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28	115550.9		
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99	101069.8		
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75	132468.6		
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13	297505.2		
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24	176872.1		
10		Total	379320.2	509019.5	222043.3	1110383	
11							
12							
13							
14							
15							
16							
17							

Figure 3-11:
Numbers with decimals don't align when you choose General formatting.

Accenting your cells with the Accounting number format

Given the financial nature of most worksheets, you probably use the Accounting number format more than any other. Applying this format is easy because you can assign it to the cell selection simply by clicking the Accounting Number Format button on the Home tab.



The Accounting number format adds a dollar sign, commas between thousands of dollars, and two decimal places to any values in a selected range. If any of the values in the cell selection are negative, this number format displays them in parentheses (the way accountants like them). If you want a minus sign in front of your negative financial values rather than enclosing them in parentheses, select the Currency format on the Number Format drop-down menu or on the Number tab of the Format Cells dialog box.

You can see in Figure 3-12 only the cells containing totals are selected (cell ranges E3:E10 and B10:D10). This cell selection was then formatted with the Accounting number format by simply clicking its command button (the one with the \$ icon, naturally) in the Number group on the Ribbon's Home tab.



Although you could put all the figures in the table into the Accounting number format to line up the decimal points, this would result in a superabundance of dollar signs in a fairly small table. In this example, I only formatted the monthly and quarterly totals with the Accounting number format.

MGE 2010 Q1 Sales.xlsx - Microsoft Excel				
Accounting Number Format				
Choose an alternate currency format for the selected cell.				
For instance, choose Euros instead of Dollars.				
	Jan	Feb	Mar	Qtr 1
1	Mother Goose Enterprises - 2010 Sales			
2				
3	Jack Sprat Diet Centers	80138.58	59389.56	19960.06 \$ 159,488.20
4	Jack and Jill Trauma Centers	12345.62	89645.7	25436.84 \$ 127,428.16
5	Mother Hubbard Dog Goodies	12657.05	60593.56	42300.28 \$ 115,550.89
6	Rub-a-Dub-Dub Tubs and Spas	17619.79	40635	42814.99 \$ 101,069.78
7	Georgie Porgie Pudding Pies	57133.56	62926.31	12408.75 \$ 132,468.62
8	Hickory, Dickory, Doc Clock Repair	168591	124718.1	4196.13 \$ 297,505.23
9	Little Bo Peep Pet Detectives	30834.63	71111.25	74926.24 \$ 176,872.12
10	Total	\$ 379,320.23	\$ 509,019.48	\$ 222,043.29 \$ 1,110,383.00
11				
12	Month/Qtrly Percentage	0.341612065	0.458417933	0.199970001
13				
14				
15				
16				
17				

Figure 3-12: The totals in the Mother Goose sales table after clicking the Accounting Number Format button on the Home tab.

“Look, Ma, no more format overflow!”

When I apply the Accounting number format to the selection in the cell ranges of E3:E10 and B10:D10 in the sales table shown in Figure 3-12, Excel adds dollar signs, commas between the thousands, a decimal point, and two decimal places to the highlighted values. At the same time, Excel automatically widens columns B, C, D, and E just enough to display all this new formatting. In versions of Excel earlier than Excel 2003, you had to widen these columns yourself, and instead of the perfectly aligned numbers, you were confronted with columns of #####s in cell ranges E3:E10 and B10:D10. Such pound signs (where nicely formatted dollar totals should be) serve as overflow indicators, declaring that whatever formatting you added to the value in that cell has added so much to the value’s display that Excel can no longer display it within the current column width.

Fortunately, Excel eliminates the format overflow indicators when you’re formatting the values in your cells by automatically widening the columns. The only time you’ll ever run across these dreaded #####s in your cells is when you take it upon yourself to narrow a worksheet column manually (see the section “Calibrating Columns,” later in this chapter) to the extent that Excel can no longer display all the characters in its cells with formatted values.

Currying your cells with the Comma Style

The Comma Style format offers a good alternative to the Currency format. Like Currency, the Comma Style format inserts commas in larger numbers to separate thousands, hundred thousands, millions, and . . . well, you get the idea.

This format also displays two decimal places and puts negative values in parentheses. What it doesn’t display is dollar signs. This makes it perfect for formatting tables where it’s obvious that you’re dealing with dollars and cents or for larger values that have nothing to do with money.

The Comma Style format also works well for the bulk of the values in the sample first-quarter sales worksheet. Check out Figure 3-13 to see this table after I format the cells containing the monthly sales for all the Mother Goose Enterprises with the Comma Style format. To do this, select the cell range B3:D9 and click the Comma Style button — the one with the comma icon (,) — in the Number group on the Home tab.

Note how, in Figure 3-13, the Comma Style format takes care of the earlier decimal alignment problem in the quarterly sales figures. Moreover, Comma Style–formatted monthly sales figures align perfectly with the Currency format–styled monthly totals in row 10. If you look closely (you may need a magnifying glass for this one), you see that these formatted values no longer abut the right edges of their cells; they’ve moved slightly to the left. The gap on the right between the last digit and the cell border accommodates the right parenthesis in negative values, ensuring that they, too, align precisely on the decimal point.

Figure 3-13:
Monthly sales figures after formatting cells with the Comma Style number format.

	Jan		Qtr 1	
3 Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20
4 Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16
5 Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89
6 Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78
7 Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62
8 Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23
9 Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12
10 Total	\$379,320.23	\$509,019.48	\$222,043.29	\$1,110,383.00
12 Month/Qtrly Percentage	0.341612065	0.458417933	0.199970001	

Playing around with Percent Style

Many worksheets use percentages in the form of interest rates, growth rates, inflation rates, and so on. To insert a percentage in a cell, type the percent sign (%) after the number. To indicate an interest rate of 12 percent, for example, you enter **12%** in the cell. When you do this, Excel assigns a Percentage number format and, at the same time, divides the value by 100 (that's what makes it a percentage) and places the result in the cell (0.12 in this example).

Not all percentages in a worksheet are entered by hand in this manner. Some may be calculated by a formula and returned to their cells as raw decimal values. In such cases, you should add a Percent format to convert the calculated decimal values to percentages (done by multiplying the decimal value by 100 and adding a percent sign).

The sample first-quarter-sales worksheet just happens to have some percentages calculated by formulas in row 12 that need formatting (these formulas indicate what percentage each monthly total is of the first-quarter total in cell E10). In Figure 3-14, these values reflect Percent Style formatting. To accomplish this feat, you simply select the cells and click the Percent Style button in the Number group on the Home tab. (Need I point out that it's the button with the % symbol?)

The screenshot shows an Excel spreadsheet titled 'MGE 2010 Q1 Sales.xlsx'. The data is organized as follows:

	Jan	Feb	Mar	Qtr 1
1 Mother Goose Enterprises - 2010 Sales				
2				
3 Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20
4 Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16
5 Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89
6 Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78
7 Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62
8 Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23
9 Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12
10 Total	\$ 379,320.23	\$ 509,019.48	\$ 222,043.29	\$ 1,110,383.00
11				
12 Month/Qtrly Percentage	34%	46%	20%	
13				
14				
15				
16				
17				

Figure 3-14: Monthly-to-quarterly sales percentages with Percentage number formatting.

Deciding how many decimal places

You can increase or decrease the number of decimal places used in a number entered by using the Accounting Number Format, Comma Style, or Percent Style button in the Number group of the Home tab simply by clicking the Increase Decimal button or the Decrease Decimal button in this group.

Each time you click the Increase Decimal button (the one with the arrow pointing left), Excel adds another decimal place to the number format you apply. Percentages appear in the cell range B12:D12 (see Figure 3-15) after I increase the number of decimal places in the Percent format from none to two. (Percent Style doesn't use any decimal places.) I accomplish this by clicking the Increase Decimal button twice.

The values behind the formatting

Make no mistake about it — all that these fancy number formats do is spiff up the presentation of the values in the worksheet. Like a good illusionist, a particular number format sometimes appears to transform some entries, but in reality, the entries are the same old numbers you started with. For example, suppose that a formula returns the following value:

25.6456

Figure 3-15: Monthly-to-quarterly sales percentages after adding two decimal places to the Percentage number format.

Mother Goose Enterprises - 2010 Sales				
	Jan	Feb	Mar	Qtr 1
Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20
Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16
Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89
Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78
Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62
Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23
Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12
Total	\$ 379,320.23	\$ 509,019.48	\$ 222,043.29	\$ 1,110,383.00
Month/Qtrly Percentage	34.16%	45.84%	20.00%	

Now suppose that you format the cell containing this value with the Accounting Number Format button on the Home tab. The value now appears as follows:

\$25.65

This change may lead you to believe that Excel rounded the value up to two decimal places. In fact, the program has rounded up only the *display* of the calculated value — the cell still contains the same old value of 25.6456. If you use this cell in another worksheet formula, Excel uses the behind-the-scenes value in its calculation, not the spiffed-up one shown in the cell.



If you want the values to match their formatted appearance in the worksheet, Excel can do that in a single step. Be forewarned, however, that this is a one-way trip. You can convert all underlying values to the way they are displayed by selecting a single check box, but you can't return them to their previous state by deselecting this check box.

Well, because you insist on knowing this little trick anyway, here goes (just don't write and try to tell me that you weren't warned):

- 1. Make sure that you format all the values in your worksheet with the right number of decimal places.**

You must do this step before you convert the precision of all values in the worksheet to their displayed form.

2. Choose **File**⇨**Options**⇨**Advanced** or press **Alt+F1A** to open the **Advanced** tab of Excel Options dialog box.
3. In the **When Calculating This Workbook** section, click the **Set Precision as Displayed** check box (to fill it with a check mark).
Excel displays the Data Will Permanently Lose Accuracy alert dialog box.
4. Go ahead (**live dangerously**) and click the **OK** button or press **Enter** to convert all values to match their display. Click **OK** again to close the Excel Options dialog box.



Save the workbook with the calculated values. After converting all the values in a worksheet by selecting the Set Precision as Displayed check box, open the Save As dialog box (File⇨Save As or press Alt+FA). Edit the filename in the File Name text box (maybe by appending **as Displayed** to the current filename) before you click the Save button or press Enter. That way, you'll have two copies: the original workbook file with the values as entered and calculated by Excel and the new *as Displayed* version.

Make it a date!

In Chapter 2, I mention that you can easily create formulas that calculate the differences between the dates and times that you enter in your worksheets. The only problem is that when Excel subtracts one date from another date or one time from another time, the program automatically formats the calculated result in a corresponding date or time number format as well. For example, if you enter 8-15-10 in cell B4 and 4/15/10 in cell C4 and in cell D4 enter the following formula for finding the number of elapsed days between the two dates:

```
=B4-C4
```

Excel correctly returns the result of 122 (days) using the General number format. However, when dealing with formulas that calculate the difference between two times in a worksheet, you have to reformat the result that appears in a corresponding time format into the General format. For example, suppose that you enter 8:00 AM in cell B5 and 4:00 PM in cell C5 and then create in cell D5 the following formula for calculating the difference in hours between the two times:

```
=C5-B5
```

You then have to convert the result in cell D5 — that automatically appears as 8:00 AM — to the General format. When you do this, the fraction 0.333333 —

representing its fraction of the total 24-hour period — replaces 8:00 AM in cell D5. You can then convert this fraction of a total day into the corresponding number of hours by multiplying this cell by 24.

Ogling some of the other number formats

Excel supports more number formats than just the Accounting, Comma Style, and Percentage number formats. To use them, select the cell range (or ranges) you want to format and select Format Cells on the cell shortcut menu (right-click somewhere in the cell selection to activate this menu) or just press Ctrl+1 to open the Format Cells dialog box.

After the Format Cells dialog box opens with the Number tab displayed, you select the desired format from the Category list box. Some number formats — such as Date, Time, Fraction, and Special — give you further formatting choices in a Type list box. Other number formats, such as Number and Currency, have their own particular boxes that give you options for refining their formats. When you click the different formats in these list boxes, Excel shows what effect this would have on the first of the values in the current cell selection in the Sample area above. When the sample has the format that you want to apply to the current cell selection, you just click OK or press Enter to apply the new number format.

Excel contains a nifty category of number formats called Special. The Special category contains the following four number formats that may interest you:

- ✓ **Zip Code:** Retains any leading zeros in the value (important for zip codes and of absolutely no importance in arithmetic computations). Example: 00123.
- ✓ **Zip Code + 4:** Automatically separates the last four digits from the first five digits and retains any leading zeros. Example: 00123-5555.
- ✓ **Phone Number:** Automatically encloses the first three digits of the number in parentheses and separates the last four digits from the previous three with a dash. Example: (999) 555-1111.
- ✓ **Social Security Number:** Automatically puts dashes in the value to separate its digits into groups of three, two, and four. Example: 666-00-9999.

These Special number formats really come in handy when creating data lists in Excel that often deal with stuff like zip codes, telephone numbers, and sometimes even Social Security numbers (see Chapter 9 for more on creating and using data lists).

Calibrating Columns

For those times when Excel 2010 doesn't automatically adjust the width of your columns to your complete satisfaction, the program makes your changing the column widths a breeze. The easiest way to adjust a column is to do a *best-fit*, using the AutoFit feature. With this method, Excel automatically determines how much to widen or narrow the column to fit the longest entry currently in the column.

Here's how to use AutoFit to get the best fit for a column:

1. **Position the mouse pointer on the right border of the worksheet frame with the column letter at the top of the worksheet.**

The mouse pointer changes to a double-headed arrow pointing left and right.

2. **Double-click the mouse button.**

Excel widens or narrows the column width to suit the longest entry.

You can apply a best-fit to more than one column at a time. Simply select all the columns that need adjusting (if the columns neighbor one another, drag through their column letters on the frame; if they don't, hold down the Ctrl key while you click the individual column letters). After you select the columns, double-click any of the right borders on the frame.

Best-fit à la AutoFit doesn't always produce the expected results. A long title that spills into several columns to the right produces a very wide column when you use best-fit.



When AutoFit's best-fit won't do, drag the right border of the column (on the frame) until it's the size you need instead of double-clicking it. This manual technique for calibrating the column width also works when more than one column is selected. Just be aware that all selected columns assume whatever size you make the one that you're actually dragging.

You can also set the widths of columns from the Format button's drop-down list in the Cells group on the Home tab. When you click this drop-down button, the Cell Size section of this drop-down menu contains the following width options:

- ✓ **Column Width** to open the Column Width dialog box where you enter the number of characters that you want for the column width before you click OK

- ✓ **AutoFit Column Width** to have Excel apply best-fit to the columns based on the widest entries in the current cell selection
- ✓ **Default Width** to open the Standard Width dialog box containing the standard column width of 8.43 characters that you can apply to the columns in the cell selection

Rambling rows

The story with adjusting the heights of rows is pretty much the same as that with adjusting columns except that you do a lot less row adjusting than you do column adjusting. That's because Excel automatically changes the height of the rows to accommodate changes to their entries, such as selecting a larger font size or wrapping text in a cell. I discuss both of these techniques in the upcoming section "Altering the Alignment." Most row-height adjustments come about when you want to increase the amount of space between a table title and the table or between a row of column headings and the table of information without actually adding a blank row. (See the section "From top to bottom," later in this chapter, for details.)

To increase the height of a row, drag the bottom border of the row frame down until the row is high enough and then release the mouse button. To shorten a row, reverse this process and drag the bottom row-frame border up. To use AutoFit to best-fit the entries in a row, you double-click the bottom row-frame border.

As with columns, you can also adjust the height of selected rows using row options in the Cell Size section on the Format button's drop-down menu on the Home tab:

- ✓ **Row Height** to open the Row Height dialog box where you enter the number of points in the Row Height text box and then click OK
- ✓ **AutoFit Row Height** to return the height of selected rows to the best fit

Now you see it, now you don't

A funny thing about narrowing columns and rows: You can get carried away and make a column so narrow or a row so short that it actually disappears from the worksheet! This can come in handy for those times when you don't want part of the worksheet visible. For example, suppose you have a

worksheet that contains a column listing employee salaries — you need these figures to calculate the departmental budget figures, but you would prefer to leave sensitive info off most printed reports. Rather than waste time moving the column of salary figures outside the area to be printed, you can just hide the column until after you print the report.

Hiding worksheet columns

Although you can hide worksheet columns and rows by just adjusting them out of existence, Excel does offer an easier method of hiding them, via the Hide & Unhide option on the Format button's drop-down menu (located in the Cells group of the Home tab). Suppose that you need to hide column B in the worksheet because it contains some irrelevant or sensitive information that you don't want printed. To hide this column, you could follow these steps:

- 1. Click anywhere in column B to select the column.**
- 2. Click the drop-down button attached to the Format button in the Cells group on the Home tab.**

Excel opens the Format button's drop-down menu.

- 3. Click Hide & Unhide⇨Hide Columns on the drop-down menu.**

That's all there is to it — column B goes *poof!* All the information in the column disappears from the worksheet. When you hide column B, notice that the row of column letters in the frame now reads A, C, D, E, F, and so forth.



You could just as well have hidden column B by right-clicking its column letter on the frame and then choosing the Hide command on the column's shortcut menu.

Now, suppose that you've printed the worksheet and need to make a change to one of the entries in column B. To unhide the column, follow these steps:

- 1. Position the mouse pointer on column letter A in the frame and drag the pointer right to select both columns A and C.**

You must drag from A to C to include hidden column B as part of the column selection — don't click while holding down the Ctrl key or you won't get B.

- 2. Click the drop-down button attached to the Format button in the Cells group on the Home tab.**
- 3. Click Hide & Unhide⇨Unhide Columns on the drop-down menu.**

Excel brings back the hidden B column, and all three columns (A, B, and C) are selected. You can then click the mouse pointer on any cell in the worksheet to deselect the columns.



You could also unhide column B by selecting columns A through C, right-clicking either one of them, and then choosing the Unhide command on the column shortcut menu.

Hiding worksheet rows

The procedure for hiding and unhiding rows of the worksheet is essentially the same as for hiding and unhiding columns. The only difference is that after selecting the rows to hide, you click Hide & Unhide⇨Hide Rows on the Format button's drop-down menu and Hide & Unhide⇨Unhide Rows to bring them back.



Don't forget that you can use the Hide and Unhide options on the rows' shortcut menu to make selected rows disappear and then reappear in the worksheet.

Futzing with the Fonts

When you start a new worksheet, Excel 2010 assigns a uniform font and type size to all the cell entries you make. The default font varies according to the version of Windows under which you're running Excel. When you run Excel on Windows 7 and Vista, Excel uses its new Calibri font (the so-called Body Font) in 11-point size, and when running Excel under Windows XP, it uses its standard Arial font in a 10-point size. Although these two fonts may be fine for normal entries, you may want to use something with a little more zing for titles and headings in the worksheet.



If you don't especially care for the standard font that Excel uses on your version of Windows, modify it from the General tab of the Excel Options dialog box (choose File⇨Options or press Alt+F). Look for the Use This Font drop-down list box (containing Body Font as the default choice) in the When Creating New Workbooks section and then click the name of new font you want to make standard from this drop-down list. If you want a different type size, choose the Font Size drop-down list box and click a new point size on its drop-down menu or enter the new point size for the standard font directly into the Font Size text box.

Using the buttons in the Font group on the Home tab, you can make most font changes (including selecting a new font style or new font size) without having to resort to changing the settings on the Font tab in the Format Cells dialog box (Ctrl+1):

- ✓ To select a new font for a cell selection, click the drop-down button next to the Font combo box and then select the name of the font you want to use from the list box. Excel displays the name of each font that appears

in this list box in the actual font named (so that the font name becomes an example of what the font looks like — onscreen anyway).

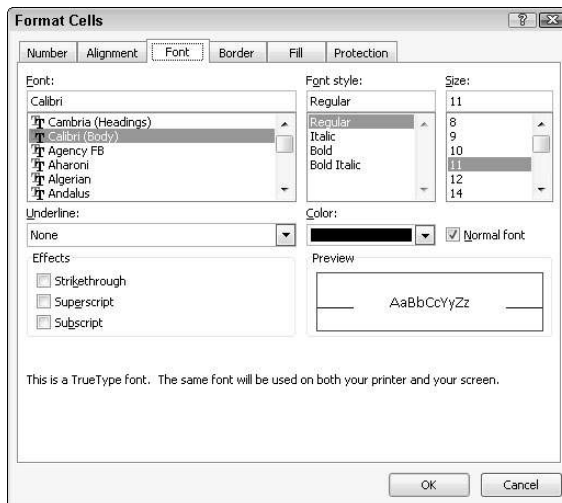
- To change the font size, click the drop-down button next to the Font Size combo box, select the new font size or click the Font Size text box, type the new size, and then press Enter.

You can also add **bold**, *italic*, underlining, or ~~strikethrough~~ to the font you use. The Font group of the Home tab contains the Bold, Italic, and Underline buttons, which not only add these attributes to a cell selection but remove them as well. After you click any of these attribute tools, notice that the tool becomes shaded whenever you position the cell cursor in the cell or cells that contain that attribute. When you click a selected format button to remove an attribute, Excel no longer shades the attribute button when you select the cell.

Although you'll probably make most font changes with the Home tab on the Ribbon, on rare occasions you may find it more convenient to make these changes from the Font tab in the Format Cells dialog box (Ctrl+1).

As you can see in Figure 3-16, this Font tab in the Format Cells dialog box brings together under one roof fonts, font styles (bold and italics), effects (strikethrough, superscript, and subscript), and color changes. When you want to make many font-related changes to a cell selection, working in the Font tab may be your best bet. One of the nice things about using this tab is that it contains a Preview box that shows you how your font changes appear (onscreen at least).

Figure 3-16:
Use the
Font tab on
the Format
Cells dialog
box to make
many font
changes at
one time.



To change the color of the entries in a cell selection, click the Font Color button's drop-down menu in the Font group on the Home tab and then select the color you want the text to appear in the drop-down palette. You can use Live Preview to see what the entries in the cell selection look like in a particular font color by moving the mouse pointer over the color swatches in the palette before you select one by clicking it (assuming, of course, that the palette doesn't cover the cells).



If you change font colors and then print the worksheet with a black-and-white printer, Excel renders the colors as shades of gray. The Automatic option at the top of the Font Color button's drop-down menu picks up the color assigned in Windows as the window text color. This color is black unless you change it in your display properties. (For help on this subject, please refer to *Microsoft Windows XP For Dummies*, *Microsoft Windows Vista For Dummies*, or *Microsoft Windows 7 For Dummies* all by Andy Rathbone — and be sure to tell Andy that Greg sent ya!)

Altering the Alignment

The horizontal alignment assigned to cell entries when you first make them is simply a function of the type of entry it is: All text entries are left-aligned, and all values are right-aligned with the borders of their cells. However, you can alter this standard arrangement anytime it suits you.

The Alignment group of the Home tab contains three normal horizontal alignment tools: the Align Left, Center, and Align Right buttons. These buttons align the current cell selection exactly as you expect them to. On the right side of the Alignment group, you usually find the special alignment button called Merge & Center.

Despite its rather strange name, you'll want to get to know this button. You can use it to center a worksheet title across the entire width of a table in seconds (or faster, depending upon your machine). I show you in Figures 3-17 and 3-18 how you can use this tool. In Figure 3-17, notice that the worksheet title Mother Goose Enterprises – 2010 Sales is in cell A1. To center this title over the table (which extends from column A through E), select the cell range A1:E1 (the width of the table) and then click the Merge & Center button in the Alignment group on the Ribbon's Home tab.

Mother Goose Enterprises - 2010 Sales				
	Jan	Feb	Mar	Qtr 1
Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20
Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16
Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89
Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78
Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62
Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23
Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12
Total	\$ 379,320.23	\$ 509,019.48	\$ 222,043.29	\$ 1,110,383.00
Month/Qtrly Percentage	34.16%	45.84%	20.00%	

Figure 3-17:
A worksheet
title before
merging and
centering.

Look at Figure 3-18 to see the result: The cells in row 1 of columns A through E are merged into one cell, and now the title is properly centered in this “super” cell and consequently over the entire table.



TIP

If you ever need to split up a supercell that you’ve merged with Merge & Center back into its original, individual cells, select the cell and then simply click the Merge & Center button in the Alignment group on the Home tab again. You can also do this by clicking the drop-down button attached to the Merge & Center button on the Home tab and then clicking Unmerge Cells on this drop-down menu (a few more steps, I’d say!).

Intent on indents

In Excel 2010, you can indent the entries in a cell selection by clicking the Increase Indent button. The Increase Indent button in the Alignment group of the Home tab sports a picture of an arrow pushing the lines of text to the right. Each time you click this button, Excel indents the entries in the current cell selection to the right by three character widths of the standard font. (See the section “Futzin’ with the Fonts,” earlier in this chapter, if you don’t know what a standard font is or how to change it.)

You can remove an indent by clicking the Decrease Indent button (to the immediate left of the Increase Indent button) on the Home tab with the

picture of the arrow pushing the lines of text to the left. Additionally, you can change how many characters an entry indents with the Increase Indent button (or outdents with the Decrease Indent button). Open the Format Cells dialog box (Ctrl+1). Select the Alignment tab, and then alter the value in the Indent text box (by typing a new value in this text box or by dialing up a new value with its spinner buttons).

Figure 3-18:
A worksheet title after merging and centering it across columns A through E.

Mother Goose Enterprises - 2010 Sales				
	Jan	Feb	Mar	Qtr 1
Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20
Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16
Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89
Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78
Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62
Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23
Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12
Total	\$379,320.23	\$509,019.48	\$222,043.29	\$1,110,383.00
Month/Qtrly Percentage	34.16%	45.84%	20.00%	

From top to bottom

Left, *right*, and *center* alignment all refer to the horizontal positioning of a text entry in relation to the left and right cell borders (that is, horizontally). You can also align entries in relation to the top and bottom borders of their cells (that is, vertically). Normally, all entries align vertically with the bottom of the cells (as though they were resting on the very bottom of the cell). You can also vertically center an entry in its cell or align it with the top of its cell.

To change the vertical alignment of a cell range that you've selected, click the appropriate button (Top Align, Middle Align, or Bottom Align) in the Alignment group on the Home tab.

Figure 3-19 shows the title for the 2010 Mother Goose Enterprises sales worksheet after centering it vertically in its cell by clicking the Middle Align button on the Home tab. (This text entry was previously centered across the cell range A1:E1; the height of row 1 is increased from the normal 15 points to 36 points.)

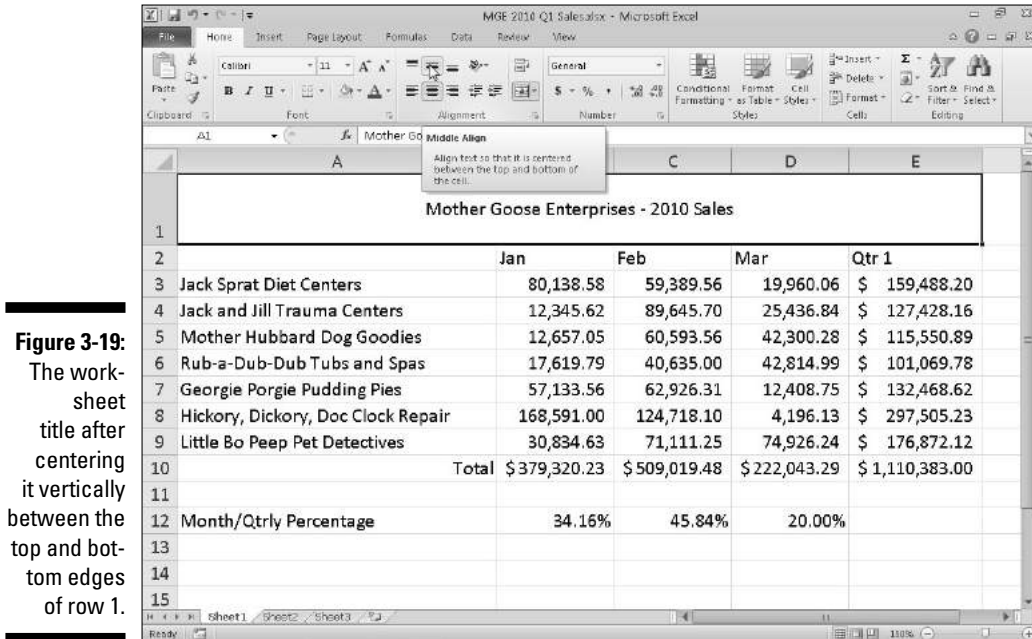


Figure 3-19:
The worksheet title after centering it vertically between the top and bottom edges of row 1.

Tampering with how the text wraps

Traditionally, column headings in worksheet tables have been a problem — you had to keep them really short or abbreviate them if you wanted to avoid widening all the columns more than the data warranted. You can avoid this problem in Excel by using the Wrap Text button in the Alignment group on the Home tab (the one to the immediate right of the Orientation button). In Figure 3-20, I show a new worksheet in which the column headings containing the various companies within the vast Mother Goose Enterprises conglomerate use the Wrap Text feature to avoid widening the columns as much as these long company names would otherwise require.

To create the effect shown in Figure 3-20, select the cells with the column headings (the cell range B2:H2) and then click the Wrap Text button in the Alignment group on the Home tab.

Selecting Wrap Text breaks up the long text entries (that either spill over or cut off) in the selection into separate lines. To accommodate more than one line in a cell, the program automatically expands the row height so that the entire wrapped-text entry is visible.

When you select Wrap Text, Excel continues to use the horizontal and vertical alignment you specify for the cell. You can use any of the Horizontal alignment options found on the Alignment tab of the Format Cells dialog box (Ctrl+1), including Left (Indent), Center, Right (Indent), Justify, or Center Across Selection. However, you can't use the Fill option or Distributed (Indent) option. Select the Fill option on the Horizontal drop-down list box only when you want Excel to repeat the entry across the entire width of the cell.

If you want to wrap a text entry in its cell and have Excel justify the text with both the left and right borders of the cell, select the Justify option from the Horizontal drop-down list box in the Alignment tab in the Format Cells dialog box.

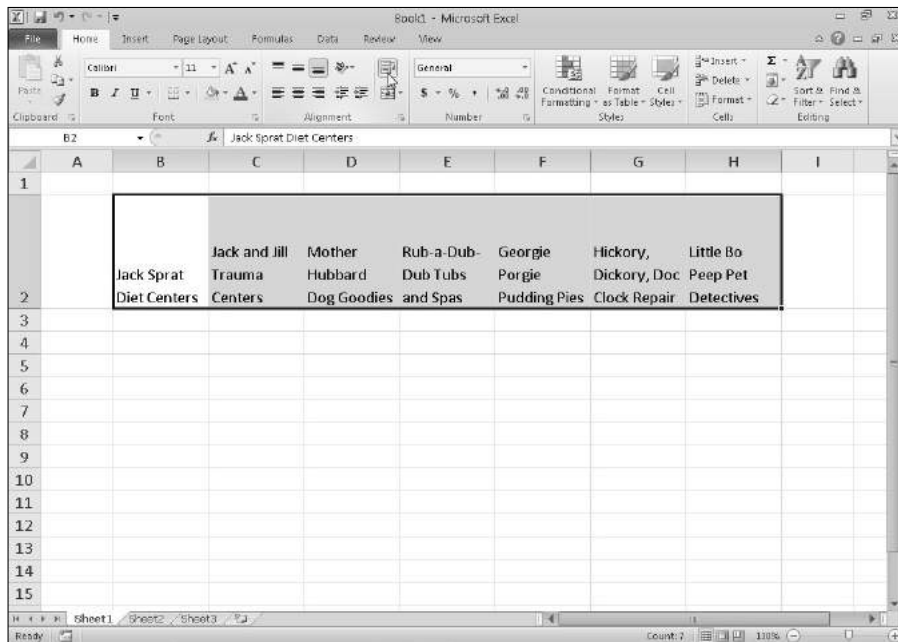


Figure 3-20:
A new worksheet with the column headings formatted with the Wrap Text option.



You can break a long text entry into separate lines by positioning the insertion point in the cell entry (or on the Formula bar) at the place where you want the new line to start and pressing Alt+Enter. Excel expands the row containing the cell (and the Formula bar above) when it starts a new line. When you press Enter to complete the entry or edit, Excel automatically wraps the text in the cell, according to the cell's column width and the position of the line break.

Reorienting cell entries

Instead of wrapping text entries in cells, you may find it more beneficial to change the orientation of the text by rotating the text up (in a counterclockwise direction) or down (in a clockwise direction). Peruse Figure 3-21 for a situation where changing the orientation of the wrapped column headings works much better than just wrapping them in their normal orientation in the cells.

This example shows the same column headings for the sample order form I introduced in Figure 3-20 after rotating them 90 degrees counterclockwise. To make this switch, first select the cell range B2:H2. Next, click the Orientation button in the Alignment group on the Home tab and then click the Rotate Text Up option on the drop-down menu.

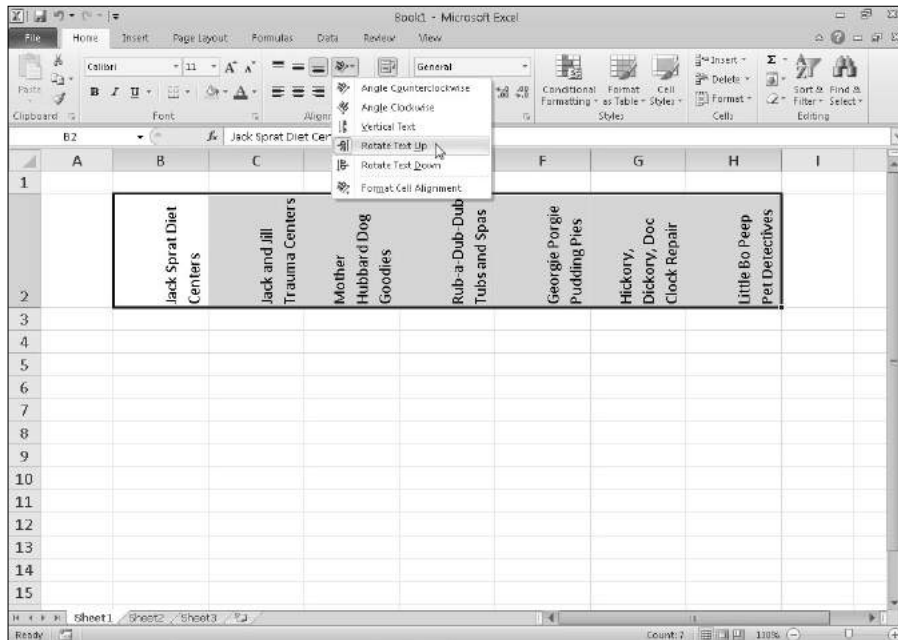


Figure 3-21:
Column headings rotated 90° counter-clockwise.

Figure 3-22 shows the same headings rotated up at a 45-degree angle. To create what you see in this figure, you click the Angle Counterclockwise option on the Orientation button's drop-down menu after making the same cell selection, B2:H2.

If you need to set the rotation of the entries in a spreadsheet at angles other than 45 and 90 degrees (up or down), you need to click the Format Cell Alignment option on the Orientation button's drop-down menu. Doing so opens the Alignment tab of the Format Cells dialog box (or press Ctrl+1 and click the Alignment tab) where you can then use the controls in the Orientation section to set the angle and number of degrees.

To set a new angle, enter the number of degrees in the Degrees text box, click the appropriate place on the semicircular diagram, or drag the line extending from the word *Text* in the diagram to the desired angle.



To angle text up using the Degrees text box, enter a positive number between 1 and 45 in the text box. To angle the text down, enter a negative number between -1 and -45.

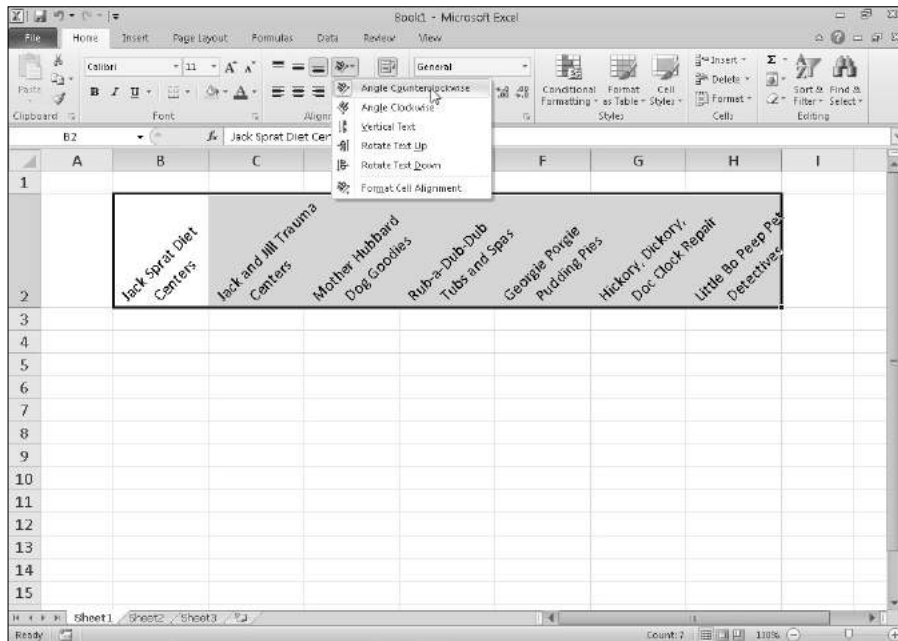


Figure 3-22:
Column headings rotated 45° counter-clockwise.



To set the text vertically so that each letter is above the other in a single column, click the Vertical Text option on the Orientation button's drop-down menu on the Home tab.

Shrink to fit

For those times when you need to prevent Excel from widening the column to fit its cell entries (as might be the case when you need to display an entire table of data on a single screen or printed page), use the Shrink to Fit text control.

Click the Alignment tab of the Format Cells dialog box (Ctrl+1) and then click the Shrink to Fit check box in the Text Control section. Excel reduces the font size of the entries to the selected cells so that they don't require changing the current column width. Just be aware when using this Text Control option that, depending on the length of the entries and width of the column, you can end up with some text entries so small that they're completely illegible!

Bring on the borders!

The gridlines you normally see in the worksheet to separate the columns and rows are just guidelines to help you keep your place as you build your spreadsheet. You can choose to print them with your data or not (by checking or clearing the Print check box that appears in the Gridlines section of the Sheet Options group on the Page Layout tab).

To emphasize sections of the worksheet or parts of a particular table, you can add borderlines or shading to certain cells. Don't confuse the *borderlines* that you add to accent a particular cell selection with the *gridlines* used to define cell borders in the worksheet — borders that you add print regardless of whether you print the worksheet gridlines.



To see the borders that you add to the cells in a worksheet, remove the gridlines normally displayed in the worksheet by clearing the View check box in the Gridlines section of the Sheet Options group on the Page Layout tab.

To add borders to a cell selection, click the drop-down button attached to the Borders button in the Font group on the Home tab. This displays a drop-down menu with all the border options you can apply to the cell selection (see Figure 3-23) where you click the type of line you want to apply to all its cells.

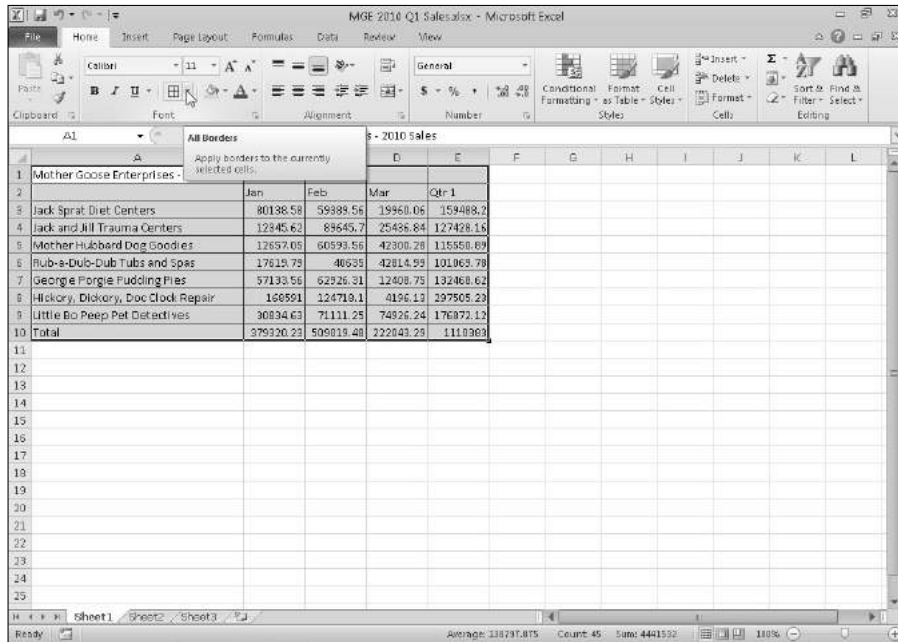


Figure 3-23:
Select borders for a cell selection with the Borders button on the Home tab.

When selecting options on this drop-down menu to determine where you want the borderlines drawn, keep these things in mind:

- ✓ To have Excel draw borders only around the outside edges of the entire cell selection (in other words, following the path of the expanded cell cursor), click the Outside Borders or the Thick Box Border options on this menu. To draw the outside borders yourself around an unselected cell range in the active worksheet, click the Draw Border option, drag the mouse (using the Pencil mouse pointer) through the range of cells, and then click the Borders button on the Home tab's Font group.
- ✓ If you want borderlines to appear around all four edges of each cell in the cell selection (like a paned window), select the All Borders option on this drop-down menu. If you want to draw the inside and outside borders yourself around an unselected cell range in the active worksheet, click the Draw Border Grid option, drag the mouse (using the Pencil mouse pointer) through the range of cells, and then click the Borders button on the Home tab.

To change the type of line, line thickness, or color of the borders you apply to a cell selection, you must open the Format Cells dialog box and use the options on its Border tab (click More Borders at the bottom of the Borders button's drop-down menu or press Ctrl+1 and then click the Border tab).

To select a new line thickness or line style for a border you're applying, click its example in the Style section. To change the color of the border you want to apply, click the color sample on the Color drop-down palette. After you select a new line style and/or color, apply the border to the cell selection by clicking the appropriate line in either the Presets or Border section of the Border tab before you click OK.



To get rid of existing borders in a worksheet, you must select the cell or cells that presently contain them and then click the No Border option at the top of the second section on the Borders button's drop-down menu.

Applying fill colors, patterns, and gradient effects to cells

You can also add emphasis to particular sections of the worksheet or one of its tables by changing the fill color of the cell selection and/or applying a pattern or gradient to it.



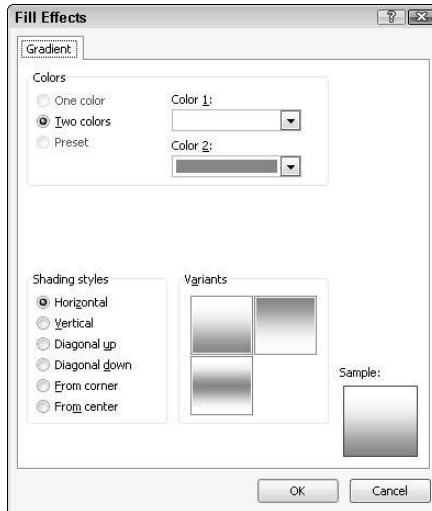
If you're using a black-and-white printer, you want to restrict your color choices to light gray in the color palette. Additionally, you want to restrict your use of pattern styles to the very open ones with few dots when enhancing a cell selection that contains any kind of entries (otherwise, the entries will be almost impossible to read when printed).

To choose a new fill color for the background of a cell selection, you can click the Fill Color button's drop-down menu in the Font group on the Home tab and then select the color you want to use in the drop-down palette. Remember that you can use Live Preview to see what the cell selection looks like in a particular fill color by moving the mouse pointer over the color swatches. Click one to select it.

To choose a new pattern for a cell selection, you must open the Format Cells dialog box (Ctrl+1), and then click the Fill tab. To change the pattern of the cell selection, click a pattern swatch from the Pattern Style button's pattern palette. To add a fill color to the pattern you select, click its color swatch in the Background Color section of the Fill tab.

If you want to add a gradient effect to the cell selection that goes from one color to another in a certain direction, click the Fill Effects button on the Fill tab to open the Fill Effects dialog box (see Figure 3-24). This dialog box contains a Gradient tab with controls that enable you to determine the two colors to use as well as shading style and variant.

Figure 3-24:
Select a
new gradi-
ent for a cell
selection
in the Fill
Effects
dialog box.



After you select the colors and styles of the gradient, check the Sample swatch in the Fill Effects dialog box. When you have it the way you want it, click OK to close the Fill Effects dialog box and return to the Format Cells dialog box. The selected gradient effect then appears in its Sample area on the Fill tab in the Format Cells dialog box. Unfortunately, this is one area where Live Preview doesn't work, so you're just going to have to click its OK button to apply the gradient to the cell selection to see how it actually looks in the worksheet.



Although you can't select new patterns or gradients (only colors) with the Fill Color button on the Home tab, you can remove fill colors, patterns, and gradients assigned to a cell selection by clicking the No Fill option on the Fill Color button's drop-down menu.

Do It in Styles

In Excel 2010, cell styles really come alive in the form of the new Cell Styles gallery that you open by clicking the Cell Styles button in the Styles group on the Home tab. The Cell Styles gallery contains loads of readymade styles you can immediately apply to the current cell selection. Simply click the desired style sample in the gallery after using the Live Preview feature to determine which style looks best on your data.

Creating a new style for the gallery

To create a new style for the gallery by example, manually format a single cell with all the attributes you want (font, font size, font color, bold, italic, underlining, fill color, pattern, borders, orientation, and so on) and then click the Cell Styles button on the Home tab followed by the New Cell Style option at the bottom of the gallery. Excel then opens a Style dialog box where you replace the generic style name (Style 1, Style 2, and so on) with your own descriptive name before you click OK.

Excel then adds a sample of your new style — the style name formatted, with the new style’s attributes — to a Custom section at the top of the Cell Styles gallery. To apply this custom style to a cell selection, you then only have to click its sample in the Custom section of the Cell Styles gallery.



The custom cell styles you create don’t become part of the current workbook until the next time you save the workbook. Therefore, you need to remember to click the Save button on the Quick Access toolbar or press Ctrl+S to save your changes after creating a new cell style if you want that style to remain part of the workbook’s Cell Styles gallery the next time you open the workbook in Excel.

Copying custom styles from one workbook into another

Excel makes it easy to copy custom cell styles that you’ve saved as part of one workbook into the workbook you’re currently working on. To copy custom styles from one workbook to another, follow these steps:

- 1. Open the workbook that needs the custom styles added to it from another existing workbook.**

This can be a brand new workbook or one that you’ve opened for editing (see Chapter 4).

- 2. Open the workbook that has the custom styles you want to copy saved as part of it.**

See the previous section, “Creating a new style for the gallery” for tips on how to create and save cell styles.

- 3. Switch back to the workbook into which you want to copy the saved custom styles.**

You can do this by clicking the workbook’s button on the Windows taskbar or using the Flip feature by pressing Alt+Tab until you select the workbook’s thumbnail in the center of the display.

4. **Click the Cell Styles button on the Home tab followed by Merge Styles in the Cell Styles gallery or press Alt+HJM.**

Excel opens the Merge Styles dialog box.

5. **Click the name of the open workbook file that contains the custom styles to copy in the Merge Styles From list box and then click OK.**

After you close the Merge Styles dialog box, Excel adds all the custom styles from the designated workbook into the current workbook adding it to the Custom section of its Cell Styles gallery. To retain the custom styles you just imported, save the current workbook (Save button on the Quick Access toolbar or Ctrl+S). Then, you can switch back to the workbook containing the original custom styles you just copied and close its file (Alt+FC).

Fooling Around with the Format Painter

Using cell styles to format ranges of worksheet cells is certainly the way to go when you have to apply the same formatting repeatedly in the workbooks you create. However, there may be times when you simply want to reuse a particular cell format and apply it to particular groups of cells in a single workbook without ever bothering to open the Cell Styles gallery.

For those occasions when you feel the urge to format on the fly (so to speak), use the Format Painter button (the paintbrush icon) in the Clipboard group on the Home tab. This wonderful little tool enables you to take the formatting from a particular cell that you fancy up and apply its formatting to other cells in the worksheet simply by selecting those cells.

To use the Format Painter to copy a cell's formatting to other worksheet cells, just follow these easy steps:

1. **Format an example cell or cell range in your workbook, selecting whatever fonts, alignment, borders, patterns, and color you want it to have.**
2. **With the cell cursor in one of the cells you just fancied up, click the Format Painter button in the Clipboard group on the Home tab.**

The mouse pointer changes from the standard thick, white cross to a thick, white cross with an animated paintbrush by its side, and you see a marquee around the selected cell with the formatting to be used by the Format Painter.

3. **Drag the white-cross-plus-animated-paintbrush pointer (the Format Painter pointer) through all the cells you want to format.**

As soon as you release the mouse button, Excel applies all the formatting used in the example cell to all the cells you just selected!

To keep the Format Painter selected so that you can format a bunch of different cell ranges with the Format Painter pointer, double-click the Format Painter button on the Home tab after you select the sample cell with the desired formatting. To stop formatting cells with the Format Painter pointer, you simply click the Format Painter button on the Home tab again (it remains selected when you double-click it) to restore the button to its unselected state and return the mouse pointer to its normal thick, white cross shape.



You can use the Format Painter to restore a cell range that you gussied all up back to its boring default (General) cell format. To do this, click an empty, previously unformatted cell in the worksheet before you click the Format Painter button and then use the Format Painter pointer to drag through the cells you want returned to the default General format.

Conditional Formatting

Before leaving behind the scintillating subject of cell formatting, there's one more formatting button in the Styles group of the Home tab of which you need to be aware. The Conditional Formatting button enables you to apply provisional formatting to a cell range based solely on the categories into which its current values fall. The cool thing about this kind of conditional formatting is that should you edit the numbers in the cell range so that their values fall into other categories, the program automatically changes their cell formatting to suit.

When you click the Conditional Formatting button in the Styles group of the Home tab, a drop-down menu appears with the following options:

- ✓ **Highlight Cells Rules** opens a continuation menu with various options for defining formatting rules that highlight the cells in the cell selection that contain certain values, text, or dates; that have values greater or less than a particular value; or that fall within a certain ranges of values.
- ✓ **Top/Bottom Rules** opens a continuation menu with various options for defining formatting rules that highlight the top and bottom values, percentages, and above and below average values in the cell selection.
- ✓ **Data Bars** opens a palette with different color data bars that you can apply to the cell selection to indicate their values relative to each other by clicking the data bar thumbnail.
- ✓ **Color Scales** opens a palette with different two- and three-colored scales that you can apply to the cell selection to indicate their values relative to each other by clicking the color scale thumbnail.

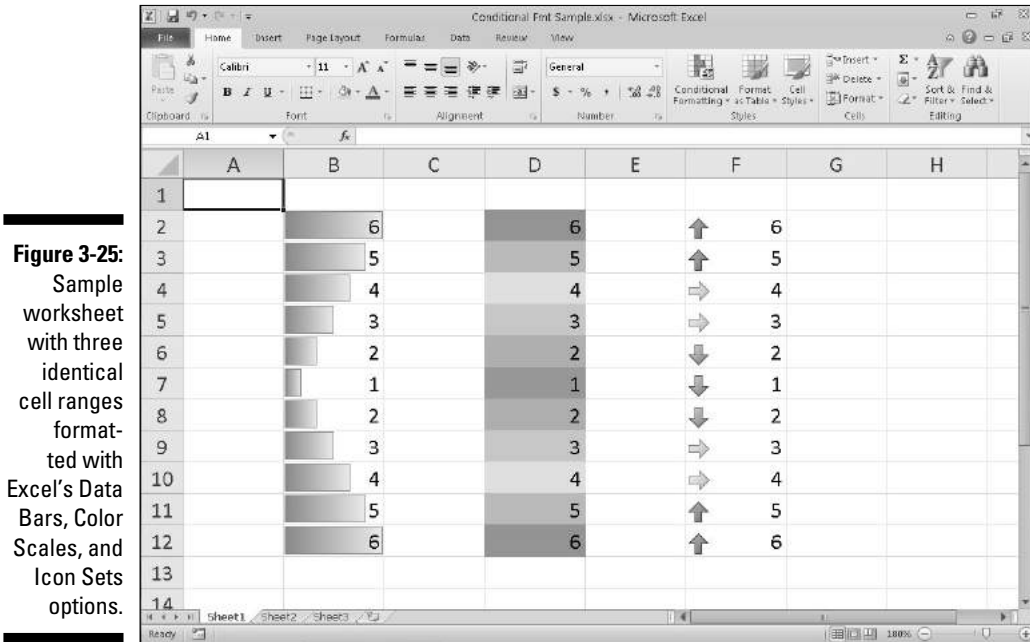
- ✔ **Icon Sets** opens a palette with different sets of icons that you can apply to the cell selection to indicate their values relative to each other by clicking the icon set.
- ✔ **New Rule** opens the New Formatting Rule dialog box where you define a custom conditional formatting rule to apply to the cell selection.
- ✔ **Clear Rules** opens a continuation menu where you can remove conditional formatting rules for the cell selection by clicking the Clear Rules from Selected Cells option, for the entire worksheet by clicking the Clear Rules from Entire Sheet option, or for just the current data table by clicking the Clear Rules from This Table option.
- ✔ **Manage Rules** opens the Conditional Formatting Rules Manager dialog box where you edit and delete particular rules as well as adjust their rule precedence by moving them up or down in the Rules list box.

Conditionally formatting values with sets of graphic scales and markers

The easiest conditional formatting that you can apply to a worksheet cell range is using the pop-up palettes of graphical scales and markers attached to the Data Bars, Color Scales, and Icon Sets options on the Conditional Formatting button's drop-down menu:

- ✔ **Data Bars** represents the relative values in the cell selection by the length of the color bar in each cell and are great for helping you quickly spot the lower and higher values within a large range of data.
- ✔ **Color Scales** classify the relative values in a cell selection with a color gradation using a one-, two-, or three-color scale and are great for identifying the distribution of values across a large range of data.
- ✔ **Icon Sets** classify the values in the cell selection into three to five categories and each icon within the set represents a range of values that go from high to low. Icon sets are great for quickly identifying the different ranges of values in a range of data.

Figure 3-25 shows you an example of cell ranges (containing identical values) using each of the three formatting types. The values in the first range (B2:B12) are conditionally formatted using blue Gradient Fill Data Bars. The values in the second range (D2:D12) are conditionally formatted using the Green, Yellow, Red Color Scale. The values in the third range (F2:F12) are conditionally formatted using the 3 Arrows Directional Icon set.



In Figure 3-25, the particular conditional formatting types Excel assigned to each cell range can be interpreted as follows:

- ✓ **Data bars** added to the cells in the first cell range, B2:B12, represent the relative size of its values graphically, much like a standard bar chart.
- ✓ **Color scale** applied to the second range, D2:D12, represent the relative size of the values in the range by color and hue (red hues applied to the lower values, yellow to the middle values, and green to the higher values).
- ✓ **Directional icons** applied to the third cell range, F2:F12, represent the relative size of the values in the range with arrow icons pointing in different directions (arrows pointing straight down for the lower values, straight up for the higher values, and sideways for middling values).

Highlighting cells according to what ranges the values fall into

The Highlight Cells Rules and Top/Bottom Rules options on Excel's Conditional Formatting drop-down menu enable you to quickly identify cell entries of particular interest in various cell ranges in your worksheet.

The options on the Highlight Cells Rules continuation menu enable you to set formats that identify values that are greater than, less than, equal to, or even between particular values that you set. This menu also contains an option for setting special formats for identifying cells that contain particular text (such as Yes, No, or even Maybe answers in a data list) or certain dates (such as project milestones and deadlines).



Perhaps one of the most useful options on the Highlight Cells Rules continuation menu is the Duplicate Values option that enables you to flag duplicate entries in a cell range by assigning them a special formatting. Doing this not only makes it easy to visually identify duplicate entries in a data list or table but also to find them electronically by searching for their particular formatting characteristics. (See Chapter 6 for details on searching your worksheets.)

The options on the Top/Bottom Rules continuation menu enable you to specially format and, therefore, easily identify values in data tables and lists that are either above or below the norm. These options not only include those for automatically formatting all values in a range that are among the top 10 highest or lowest (either in value or percentage) but also above or below the average (as calculated by dividing the total by the number of values).



In addition to using the ready-made rules for conditional formatting located on the Highlight Cells Rules and Top/Bottom Rules continuation menus, you can also create your own custom rules. When you create a custom rule, you not only specify the rule type that identifies which values or text entries to format, but also you format the colors and other aspects included in the formatting. (For details on creating custom conditional formats, consult my *Excel 2010 All-in-One For Dummies*.)

Chapter 4

Going Through Changes

In This Chapter

- ▶ Opening workbook files for editing
 - ▶ Undoing your boo-boos
 - ▶ Moving and copying with drag and drop
 - ▶ Copying formulas
 - ▶ Moving and copying with Cut, Copy, and Paste
 - ▶ Deleting cell entries
 - ▶ Deleting and inserting columns and rows
 - ▶ Spell-checking the worksheet
 - ▶ Corroborating cell entries with the Text to Speech feature
-

picture this: You just finished creating, formatting, and printing a major project with Excel — a workbook with your department’s budget for the next fiscal year. Because you finally understand a little bit about how the Excel thing works, you finish the job in crack time. You’re actually ahead of schedule.

You turn the workbook over to your boss so that she can check the numbers. With plenty of time for making those inevitable last-minute corrections, you’re feeling on top of this situation.

Then comes the reality check — your boss brings the document back, and she’s plainly agitated. “We forgot to include the estimates for the temps and our overtime hours. They go right here. While you’re adding them, can you move these rows of figures up and those columns over?”

As she continues to suggest improvements, your heart begins to sink. These modifications are in a different league than, “Let’s change these column headings from bold to italic and add shading to that row of totals.” Clearly, you’re looking at a lot more work on this baby than you had contemplated. Even worse, you’re looking at making structural changes that threaten to unravel the very fabric of your beautiful worksheet.

As the preceding fable points out, editing a worksheet in a workbook can occur on different levels:

- ✔ You can make changes that affect the contents of the cells, such as copying a row of column headings or moving a table to a new area in a particular worksheet.
- ✔ You can make changes that affect the structure of a worksheet itself, such as inserting new columns or rows (so that you can enter new data originally left out) or deleting unnecessary columns or rows from an existing table so that you don't leave any gaps.
- ✔ You can even make changes to the number of worksheets in a workbook (by either adding or deleting sheets).

In this chapter, you discover how to make these types of changes safely to a workbook. As you see, the mechanics of copying and moving data or inserting and deleting rows are simple to master. It's the impact that such actions have on the worksheet that takes a little more effort to understand. Not to worry! You always have the Undo feature to fall back on for those (hopefully rare) times when you make a little tiny change that throws an entire worksheet into complete and utter chaos.

In the final section of this chapter ("Stamping Out Errors with Text to Speech"), find out how to use the Text to Speech feature to check out and confirm the accuracy of the data entries you make in your worksheets. With Text to Speech, you can listen to your computer read back a series of cell entries while you visually corroborate their accuracy from the original source document. Text to Speech can make this sort of routine and otherwise labor-intensive editing much easier and greatly increase the accuracy of your spreadsheets.

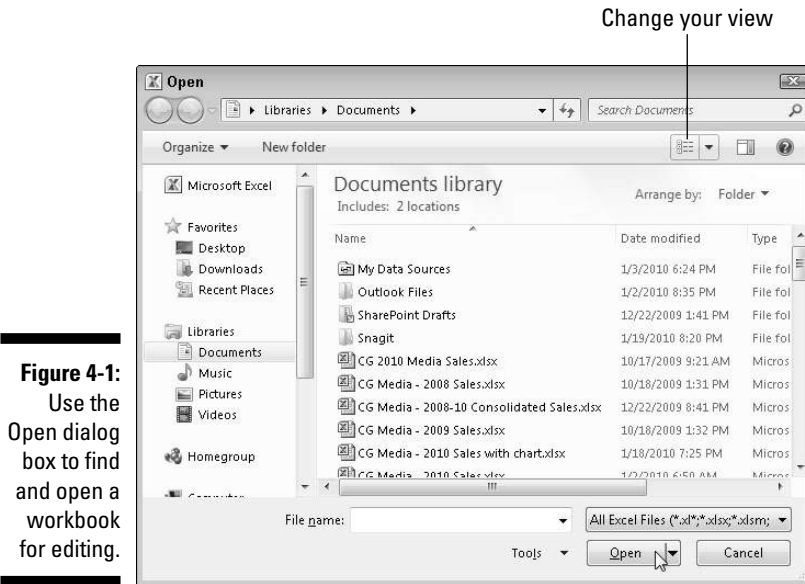
Opening the Darned Thing Up for Editing

Before you can do any damage — I mean, make any changes — in a workbook, you have to open it up in Excel. To open a workbook, you can choose File⇨Open, press Alt+FO, or use the old standby keyboard shortcuts Ctrl+O or Ctrl+F12.

Operating the Open dialog box

If you're running Excel 2010 under Windows 7, an Open dialog box very much like the one in Figure 4-1 appears. This dialog box is divided into panes: the Navigation pane on the left where you can select a new folder to open and

the main pane on the right showing the icons for all the subfolders in the current folder as well as the documents that Excel can open.



The folder with contents displayed in the Open dialog box is either the one designated as the Default File Location on the Save tab of the Excel Options dialog box or the folder you last opened during your current Excel work session. If you haven't changed the default folder location since installing Excel 2010 on your computer, this default folder is the Documents Library (simply referred to as Documents in Windows Vista).



If you're running Excel 2010 on Windows Vista, your Open dialog box is similar to the one shown in Figure 4-1 except that your Navigation pane contains a Folders item instead of Libraries under your list of Favorites. Additionally, the Views button appears between the Organize and New Folder buttons and not to their right above the Navigation and main panes.

To open a workbook in another folder, click its link in the Favorite Links section of the Navigation pane or click the Expand Folders button (the one with the triangle pointing upward) and click its folder in this list.

If you open a new folder and it appears empty of all files (and you know that it's not an empty folder), this just means the folder doesn't contain any of the types of files that Excel can open directly (such as workbooks, template

files, and macro sheets). To display all the files whether or not Excel can open them directly (meaning without some sort of conversion), click the drop-down button that appears next to the drop-down list box that currently displays All Excel Files and then click All Files on its drop-down menu.

When the icon for the workbook file you want to work with appears in the Open dialog box, you can then open it either by clicking its file icon and then clicking the Open button or, if you're handy with the mouse, by just double-clicking the file icon.



You can use the slider attached to the Views drop-down list button in the Open dialog box to change the way folder and file icons appear in the dialog box. When you select Large Icons or Extra Large Icons on this slider (or anywhere in between), the Excel workbook icons actually show a preview of the data in the upper-left corner of the first worksheet when the file is saved with the preview picture option turned on:

- ✓ To enable the preview feature when saving workbooks in Excel 2010, select the Save Thumbnail check box in the Save As dialog box before saving the file for the first time.
- ✓ To enable the preview feature when saving workbooks in Excel 97 through 2003, click the Save Preview Picture check box on the Summary tab of the workbook's Properties dialog box (File→Properties) before saving the file for the first time.

This preview of part of the first sheet can help you quickly identify the workbook you want to open for editing or printing.

Opening more than one workbook at a time

If you know that you're going to edit more than one of the workbook files shown in the list box of the Open dialog box, you can select multiple files in the list box and Excel will then open all of them (in the order they're listed) when you click the Open button or press Enter.



Remember that in order to select multiple files that appear sequentially in the Open dialog box, you click the first filename and then hold down the Shift key while you click the last filename. To select files that aren't listed sequentially, you need to hold down the Ctrl key while you click the various filenames.

After the workbook files are open in Excel, you can then switch documents by selecting their filename buttons on the Windows taskbar or by using the Flip feature (Alt+Tab) to select the workbook's thumbnail. (See Chapter 7 for detailed information on working on more than one worksheet at a time.)

The Open dialog box in Excel 2010 running on Windows XP

The Open dialog box for Windows XP is arranged a bit differently from the one in Windows 7 and Windows Vista. This Open dialog box is divided into two sections: a My Places panel on the left and a folder and file list box on the right. If the folder open in the list box is not the one that has the workbook file you need to use, use the Up One Level button in the Open dialog box to change levels until you see the folder you want to open. Use the buttons displayed in the My Places panel on the left side

of the Open dialog box (My Recent Documents, Desktop, My Documents, My Computer, and My Network Places) to open any folders associated with these buttons that contain workbook files.

When you locate the file that you want to use in the list box in the Open dialog box, open it by clicking its file icon and then clicking the Open button or pressing Enter (or by double-clicking the file icon).

Opening recently edited workbooks

If you know that the workbook you now need to edit is one of those that you opened recently, you don't even have to fool around with the Open dialog box. Just choose File→Recent to display a Recent Workbooks list to the right of the pull-down menu (or press Alt+FR) and then click the name of the workbook to open for editing.



When you open the Recent Workbooks list by pressing Alt+FR, Excel displays the number hot keys to each of the recently opened spreadsheet files in the list and you then can open the one you need to edit simply by typing its number.

Excel 2010 automatically keeps a running list of the last 20 files you opened in the Recent Workbooks list on the File tab. If you want, you can have Excel display more or fewer files in this list on the File tab.

To change the number of recently opened files that appear, follow these simple steps:

1. Choose File→Options→Advanced or press Alt+FIA to open the Advanced tab of the Excel Options dialog box.
2. Type a new entry (between 1 and 50) in the Show This Number of Recent Documents text box or use the spinner buttons to increase or decrease this number.
3. Click OK or press Enter to close the Excel Options dialog box.



If you don't want any files displayed in the Recent Workbooks list on the File tab, enter **0** in the Show This Number of Recent Documents text box or select it with the spinner buttons.



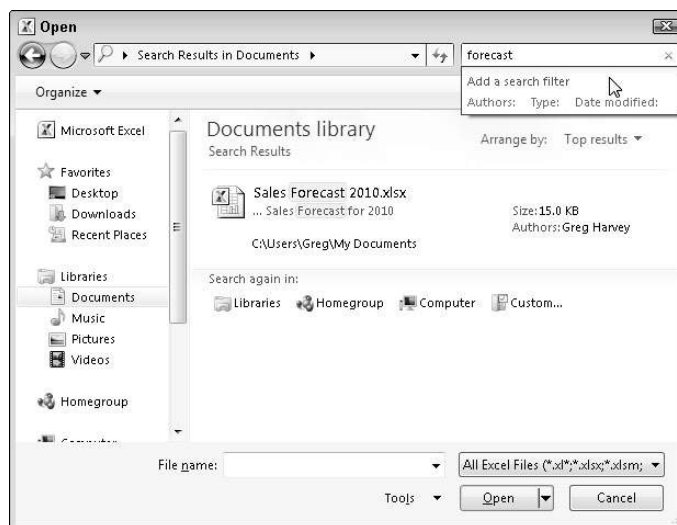
Select the Quickly Access This Number of Recent Workbooks check box on the Recent Workbooks panel in the Backstage View to have Excel display the four most recently opened workbooks as items on the File tab. That way, you can open any of them by clicking its button without having to open the Recent Workbooks panel. After selecting the Quickly Access This Number of Recent Workbooks check box, you change the number of recently opened workbooks added to the File tab by entering the new number in its text box or selecting the number with its spinner buttons.

When you don't know where to find them

The only problem you can encounter in opening a document from the Open dialog box is locating the filename. Everything's hunky-dory as long as you can see the workbook filename listed in the Open dialog box or know which folder to open in order to display it. But what about those times when a file seems to migrate mysteriously and can't be found on your computer?

When you run Excel 2010 under Windows 7 or Vista, the operating system adds a Search Documents text box (simply called Search in Vista) to the Open dialog box (see Figure 4-2). You can use this text box to search for missing workbooks from within the Open dialog box.

Figure 4-2:
Use the Search Documents text box in the Open dialog box to quickly search for any Excel workbook on your computer.



To find a missing workbook, click this search text box in the upper-right corner of the Open dialog box and then begin typing characters used in the workbook's filename or contained in the workbook itself.

As Windows finds any matches for the characters you type, the names of the workbook files (and other Excel files such as templates and macro sheets as well) appear in the Open dialog box. As soon as the workbook you want to open is listed, you can open it by clicking its icon and filename followed by the Open button or by double-clicking it.



The Open dialog box in Excel 2010 when running under Windows XP does not have a search feature built in to it. This means that to search for missing workbooks, you have to do it outside Excel by using Windows XP's search feature available on its Start menu.

Opening files with a twist

The drop-down button attached to the Open command button at the bottom of the Open dialog box enables you to open the selected workbook file(s) in a special way, including:

- ✓ **Open Read-Only:** This command opens the files you select in the Open dialog box's list box in a read-only state, which means that you can look but you can't touch. (Actually, you can touch; you just can't save your changes.) To save changes in a read-only file, you must use the Save As command (File⇨Save As or Alt+FA) and give the workbook file a new filename. (Refer to Chapter 2.)
- ✓ **Open as Copy:** This command opens a copy of the files you select in the Open dialog box. Use this method of opening files as a safety net: If you mess up the copies, you always have the originals to fall back on.
- ✓ **Open in Browser:** This command opens workbook files you save as Web pages (which I describe in Chapter 12) in your favorite Web browser. This command isn't available unless the program identifies that the selected file or files were saved as Web pages rather than plain old Excel workbook files.
- ✓ **Open in Protected View:** This command opens the workbook file in Protected View mode that keeps you from making any changes to the contents of its worksheets until you click the Enable Editing button that appears in the orange Protected View panel at the top of the screen.
- ✓ **Open and Repair:** This command attempts to repair corrupted workbook files before opening them in Excel. When you select this command, a dialog box appears giving you a choice between attempting to repair

the corrupted file or opening the recovered version, extracting data from the corrupted file, and placing it in a new workbook (which you can save with the Save command). Click the Repair button to attempt to recover and open the file. Click the Extract Data button if you tried unsuccessfully to have Excel repair the file.

Much Ado about Undo

Before you start tearing into the workbook that you just opened, get to know the Undo feature, including how it can put right many of the things that you could inadvertently mess up. The Undo command button on the Quick Access toolbar is a regular chameleon button. When you delete the cell selection by pressing the Delete key, the Undo button's ScreenTip reads Undo Clear (Ctrl+Z). If you move some entries to a new part of the worksheet by dragging it, the Undo command button ScreenTip changes to Undo Drag and Drop (Ctrl+Z).

In addition to clicking the Undo command button (in whatever guise it appears), you can also choose this command by pressing Ctrl+Z (perhaps for *unZap*).



The Undo command button on the Quick Access toolbar changes in response to whatever action you just took; that is, it changes after each action. If you forget to strike when the iron is hot, so to speak, and don't use the Undo feature to restore the worksheet to its previous state *before* you choose another command, you then need to consult the drop-down menu on the Undo button. Click its drop-down button that appears to the right of the Undo icon (the curved arrow pointing to the left). After the Undo drop-down menu appears, click the action on this menu that you want undone. Excel will then undo this action and all actions that precede it in the list (which are selected automatically).

Undo is Redo the second time around

After using the Undo command button on the Quick Access toolbar, Excel 2010 activates the Redo command button to its immediate right. If you delete an entry from a cell by pressing the Delete key and then click the Undo command button or press Ctrl+Z, the ScreenTip that appears when you position the mouse pointer over the Redo command button reads Redo Clear (Ctrl+Y).

When you click the Redo command button or press Ctrl+Y, Excel redoes the thing you just undid. Actually, this sounds more complicated than it is. It simply means that you use Undo to switch between the result of an action and the state of the worksheet just before that action until you decide how you want the worksheet (or until the cleaning crew turns off the lights and locks up the building).

What ya gonna do when you can't Undo?



Just when you think it is safe to begin gutting the company's most important workbook, I really feel that I have to tell you that (yikes!) Undo doesn't work all the time! Although you can undo your latest erroneous cell deletion, bad move, or unwise copy, you can't undo your latest rash save. (You know, like when you meant to choose Save As from the File tab to save the edited worksheet under a different document name but chose Save and ended up saving the changes as part of the current document.)

Unfortunately, Excel doesn't let you know when you are about to take a step from which there is no return — until it's too late. After you've gone and done the un-undoable and you click the Undo button where you expect its ScreenTip to say Undo *blah, blah*, it now reads Can't Undo.

One exception to this rule is when the program gives you advance warning (which you should heed). When you choose a command that is normally possible but because you're low on memory or the change will affect so much of the worksheet, or both, Excel knows that it can't undo the change if it goes through with it, the program displays an alert box telling you that there isn't enough memory to undo this action and asking whether you want to go ahead anyway. If you click the Yes button and complete the edit, just realize that you do so without any possibility of pardon. If you find out, too late, that you deleted a row of essential formulas (that you forgot about because you couldn't see them), you can't bring them back with Undo. In such a case, you would have to close the file (File⇨Close) and *NOT save your changes*.

Doing the Old Drag-and-Drop Thing

The first editing technique you need to learn is *drag and drop*. As the name implies, you can use this mouse technique to pick up a cell selection and drop it into a new place on the worksheet. Although drag and drop is primarily a technique for moving cell entries around a worksheet, you can adapt it to copy a cell selection, as well.

To use drag and drop to move a range of cell entries (one cell range at a time), follow these steps:

1. **Select a cell range.**
2. **Position the mouse pointer on one edge of the extended cell cursor that now surrounds the entire cell range.**

Your signal that you can start dragging the cell range to its new position in the worksheet is when the pointer changes to the arrowhead.

3. Drag your selection to its destination.

Drag your selection by depressing and holding down the primary mouse button — usually the left one — while moving the mouse.

While you drag your selection, you actually move only the outline of the cell range, and Excel keeps you informed of what the new cell range address would be (as a kind of drag-and-drop ScreenTip) if you were to release the mouse button at that location.

Drag the outline until it's positioned where you want the entries to appear (as evidenced by the cell range in the drag-and-drop ScreenTip).

4. Release the mouse button.

The cell entries within that range reappear in the new location as soon as you release the mouse button.

In Figures 4-3 and 4-4, I show how you can drag and drop a cell range. In Figure 4-3, I select the cell range A10:E10 (containing the quarterly totals) to move it to row 12 to make room for sales figures for two new companies (Simple Simon Pie Shoppes and Jack Be Nimble Candlesticks, which hadn't been acquired when this workbook was first created). In Figure 4-4, you see the Mother Goose Enterprises – 2010 Sales worksheet right after completing this move.

Figure 4-3:
Dragging
the cell
selection
to its new
position in a
worksheet.

	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10	Total	\$379,320.23	\$509,019.48	\$222,043.29	\$1,110,383.00	
11						
12						
13						
14						



The arguments for the SUM functions in cell range B13:E13 do not keep pace with the change — it continues to sum only the values in rows 3 through 9 after the move. However, when you enter the sales figures for these new enterprises in columns B through C in rows 10, 11, and 12, Excel shows off its smarts and updates the formulas in row 13 to include the new entries. For example, the SUM(B3:B9) formula in B13 magically becomes SUM(B3:B12).

Figure 4-4:
A worksheet
after dropping
the cell
selection
into its new
place.

A12		Total				
	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10						
11						
12	Total	\$379,320.23	\$509,019.48	\$222,043.29	\$1,110,383.00	
13						
14						
15						

Copies, drag-and-drop style

What if you want to copy rather than drag and drop a cell range? Suppose that you need to start a new table in rows farther down the worksheet, and you want to copy the cell range with the formatted title and column headings for the new table. To copy the formatted title range in the sample worksheet, follow these steps:

1. Select the cell range.

In the case of Figures 4-3 and 4-4, that's cell range A1:E2.

2. Hold the Ctrl key down while you position the mouse pointer on an edge of the selection (that is, the expanded cell cursor).

The pointer changes from a thick, shaded cross to an arrowhead with a + (plus sign) to the right of it with the drag-and-drop ScreenTip beside it. The plus sign next to the pointer is your signal that drag and drop will copy the selection rather than *move* it.

3. Drag the cell-selection outline to the place where you want the copy to appear and release the mouse button.



If, when using drag and drop to move or copy cells, you position the outline of the selection so that it overlaps any part of cells that already contain entries, Excel displays an alert box that asks whether you want to replace the contents of the destination cells. To avoid replacing existing entries and to abort the entire drag-and-drop mission, click the Cancel button in this alert box. To go ahead and exterminate the little darlings, click OK or press Enter.

Insertions courtesy of drag and drop

Like the Klingons of *Star Trek* fame, spreadsheets, such as Excel, never take prisoners. When you place or move a new entry into an occupied cell, the new entry completely replaces the old as though the old entry never existed in that cell.

To insert the cell range you're moving or copying within a populated region of the worksheet without wiping out existing entries, hold down the Shift key while you drag the selection. (If you're copying, you have to get ambitious and hold down both the Shift and Ctrl keys at the same time!)

With the Shift key depressed while you drag, instead of a rectangular outline of the cell range, you get an I-beam shape that shows where the selection will be inserted if you release the mouse button along with the address of the cell range (as a kind of Insertion ScreenTip). When you move the I-beam shape, notice that it wants to attach itself to the column and row borders while you move it. After you position the I-beam at the column or row border where you want to insert the cell range, release the mouse button. Excel inserts the cell range, moving the existing entries to neighboring blank cells (out of harm's way).



When inserting cells with drag and drop, it may be helpful to think of the I-beam shape as a pry bar that pulls apart the columns or rows along the axis of the I. Also, sometimes after moving a range to a new place in the worksheet, instead of the data appearing, you see only #####s in the cells. (Excel 2010 doesn't automatically widen the new columns for the incoming data as it does when formatting the data.) Remember that the way to get rid of the #####s in the cells is by widening those troublesome columns enough to display all the data-plus-formatting; and the easiest way to do this kind of widening is by double-clicking the right border of the column.



I held down the Shift key just as you said . . .

Drag and drop in Insert mode is one of Excel's most finicky features. Sometimes you can do everything just right and still get the alert box warning you that Excel is about to replace existing entries instead of pushing them aside. When you see this alert box, always click the Cancel

button! Fortunately, you can insert things with the Insert commands without worrying about which way the I-beam selection goes (see the "Staying In Step with Insert" section, later in this chapter).

Formulas on AutoFill

Copying with drag and drop (by holding down the Ctrl key) is useful when you need to copy a bunch of neighboring cells to a new part of the worksheet. Frequently, however, you just need to copy a single formula that you just created to a bunch of neighboring cells that need to perform the same type of calculation (such as totaling columns of figures). This type of formula copy, although quite common, can't be done with drag and drop. Instead, use the AutoFill feature (read about this in Chapter 2) or the Copy and Paste commands. (See the section "Cut and paste, digital style" later in this chapter.)

Here's how you can use AutoFill to copy one formula to a range of cells. In Figure 4-5, you can see the Mother Goose Enterprises – 2010 Sales worksheet with all the companies but this time with only one monthly total in row 12, which is in the process of being copied through cell E12.

Figure 4-5:
Copying
a formula
to a cell
range with
AutoFill.

B12		=SUM(B3:B11)				
	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10	Simple Simon Pie Shoppes	104,937.77	77,943.19	45,897.25	\$ 228,778.21	
11	Jack-Be-Nimble Candlesticks	128,237.32	95,035.19	78,654.50	\$ 301,927.01	
12	Total	\$612,495.32				+
13						
14						
15						

Figure 4-6 shows the worksheet after dragging the fill handle in cell B12 to select the cell range C12:E12 (where this formula should be copied).

Relatively speaking

Figure 4-6 shows the worksheet after the formula in a cell is copied to the cell range C12:E12 and cell B12 is active. Notice how Excel handles the copying of formulas. The original formula in cell B12 is as follows:

```
=SUM(B3:B11)
```

Figure 4-6:
The worksheet after copying the formula totaling the monthly (and quarterly) sales.

	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10	Simple Simon Pie Shoppes	104,937.77	77,943.19	45,897.25	\$ 228,778.21	
11	Jack-Be-Nimble Candlesticks	128,237.32	95,035.19	78,654.50	\$ 301,927.01	
12	Total	\$612,495.32	\$681,997.86	\$346,595.04	\$1,641,088.22	
13						
14						
15						

When the original formula is copied to cell C12, Excel changes the formula slightly so that it looks like this:

```
=SUM(C3:C11)
```

Excel adjusts the column reference, changing it from B to C, because I copied from left to right across the rows.

When you copy a formula to a cell range that extends down the rows, Excel adjusts the row numbers in the copied formulas rather than the column letters to suit the position of each copy. For example, cell E3 in the Mother Goose Enterprises – 2010 Sales worksheet contains the following formula:

```
=SUM(B3:D3)
```

When you copy this formula to cell E4, Excel changes the copy of the formula to the following:

```
=SUM(B4:D4)
```

Excel adjusts the row reference to keep current with the new row 4 position. Because Excel adjusts the cell references in copies of a formula relative to the direction of the copying, the cell references are known as *relative cell references*.

Some things are absolutes!

All new formulas you create naturally contain relative cell references unless you say otherwise. Because most copies you make of formulas require adjustments of their cell references, you rarely have to give this arrangement a second thought. Then, every once in a while, you come across an exception that calls for limiting when and how cell references are adjusted in copies.

One of the most common of these exceptions is when you want to compare a range of different values with a single value. This happens most often when you want to compute what percentage each part is to the total. For example, in the Mother Goose Enterprises – 2010 Sales worksheet, you encounter this situation in creating and copying a formula that calculates what percentage each monthly total (in the cell range B14:D14) is of the quarterly total in cell E12.

Suppose that you want to enter these formulas in row 14 of the Mother Goose Enterprises – 2010 Sales worksheet, starting in cell B14. The formula in cell B14 for calculating the percentage of the January-sales-to-first-quarter-total is very straightforward:

=B12/E12

This formula divides the January sales total in cell B12 by the quarterly total in E12 (what could be easier?). Look, however, at what would happen if you dragged the fill handle one cell to the right to copy this formula to cell C14:

=C12/F12

The adjustment of the first cell reference from B12 to C12 is just what the doctor ordered. However, the adjustment of the second cell reference from E12 to F12 is a disaster. Not only do you not calculate what percentage the February sales in cell C12 are of the first quarter sales in E12, but you also end up with one of those horrible #DIV/0! error things in cell C14.

To stop Excel from adjusting a cell reference in a formula in any copies you make, convert the cell reference from relative to absolute. You do this by pressing the function key F4, after you put Excel in Edit mode (F2). Excel indicates that you make the cell reference absolute by placing dollar signs in front of the column letter and row number. For example, in Figure 4-7, cell B14 contains the correct formula to copy to the cell range C14:D14:

=B12/\$E\$12

Figure 4-7:
Copying the formula for computing the ratio of monthly to quarterly sales with an absolute cell reference.

	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10	Simple Simon Pie Shoppes	104,937.77	77,943.19	45,897.25	\$ 228,778.21	
11	Jack-Be-Nimble Candlesticks	128,237.32	95,035.19	78,654.50	\$ 301,927.01	
12	Total	\$612,495.32	\$681,997.86	\$ 346,595.04	\$1,641,088.22	
13						
14	Monthly/Qtrly Percentage		37%			
15						

Look at the worksheet after this formula is copied to the range C14:D14 with the fill handle and cell C14 is selected (see Figure 4-8). Notice that the Formula bar shows that this cell contains the following formula:

```
=C12/$E$12
```

Figure 4-8:
The worksheet after copying the formula with the absolute cell reference.

C14		=C12/\$E\$12				
	A	B	C	D	E	F
1	Mother Goose Enterprises - 2010 Sales					
2		Jan	Feb	Mar	Qtr 1	
3	Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$ 159,488.20	
4	Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$ 127,428.16	
5	Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$ 115,550.89	
6	Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$ 101,069.78	
7	Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$ 132,468.62	
8	Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$ 297,505.23	
9	Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$ 176,872.12	
10	Simple Simon Pie Shoppes	104,937.77	77,943.19	45,897.25	\$ 228,778.21	
11	Jack-Be-Nimble Candlesticks	\$128,237.32	95,035.19	\$ 78,654.50	\$ 301,927.01	
12	Total	\$612,495.32	\$681,997.86	\$346,595.04	\$1,641,088.22	
13						
14	Monthly/Qtrly Percentage	37%	42%	21%		
15						

Because E12 was changed to \$E\$12 in the original formula, all the copies have this same absolute (non-changing) reference.



If you goof up and copy a formula where one or more of the cell references should have been absolute but you left them all relative, edit the original formula as follows:

1. Double-click the cell with the formula or press F2 to edit it.
2. Position the insertion point somewhere on the reference you want to convert to absolute.
3. Press F4.
4. When you finish editing, click the Enter button on the Formula bar and then copy the formula to the messed-up cell range with the fill handle.



Be sure to press F4 only to change a cell reference to completely absolute as I describe earlier. If you press the F4 function key a second time, you end up with a so-called *mixed reference*, where only the row part is absolute and the column part is relative (as in E\$12). If you then press F4 again, Excel comes up with another type of mixed reference, where the column part is absolute and the row part is relative (as in \$E12). If you go on and press F4 yet again, Excel changes the cell reference back to completely relative (as in E12). After you're back where you started, you can continue to use F4 to cycle through this same set of cell reference changes all over again.

Cut and paste, digital style

Instead of using drag and drop or AutoFill, you can use the old standby Cut, Copy, and Paste commands to move or copy information in a worksheet. These commands use the Office Clipboard as a kind of electronic halfway house where the information you cut or copy remains until you decide to paste it somewhere. Because of this Clipboard arrangement, you can use these commands to move or copy information to any other workbook open in Excel or even to other programs running in Windows (such as a Word 2010 document).

To move a cell selection with Cut and Paste, follow these steps:

- 1. Select the cells you want to move.**
- 2. Click the Cut command button in the Clipboard group on the Home tab (the button with the scissors icon).**

If you prefer, you can choose Cut by pressing Ctrl+X.

Whenever you choose the Cut command in Excel, the program surrounds the cell selection with a *marquee* (a dotted line that travels around the cells' outline) and displays the following message on the Status bar:

```
Select destination and press ENTER or choose Paste
```

- 3. Move the cell cursor to the new range to which you want the information moved, or click the cell in the upper-left corner of the new range.**
- 4. Press Enter to complete the move operation.**

If you're feeling ambitious, click the Paste command button in the Clipboard group on the Home tab or press Ctrl+V.

Notice that when you indicate the destination range, you don't have to select a range of blank cells that matches the shape and size of the cell selection you're moving. Excel needs to know only the location of the cell in the upper-left corner of the destination range to figure out where to put the rest of the cells.

Copying a cell selection with the Copy and Paste commands follows an identical procedure to the one you use with the Cut and Paste commands. After selecting the range to copy, you can get the information into the Clipboard by clicking the Copy button on the Ribbon's Home tab, choosing Copy from the cell's shortcut menu, or pressing Ctrl+C.

Paste it again, Sam . . .

An advantage to copying a selection with the Copy and Paste commands and the Clipboard is that you can paste the information multiple times. Just make sure that, instead of pressing Enter to complete the first copy operation, you click the Paste button on the Home tab of the Ribbon or press Ctrl+V.

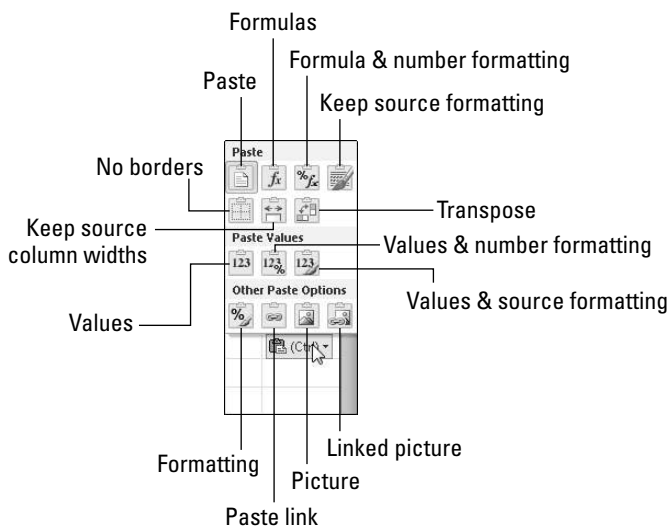
When you use the Paste command to complete a copy operation, Excel copies the selection to the range you designate without removing the marquee from the original selection. This is your signal that you can select another destination range (in either the same or a different document).

After you select the first cell of the next range where you want the selection copied, choose the Paste command again. You can continue in this manner, pasting the same selection to your heart's content. When you make the last copy, press Enter instead of choosing the Paste command button or pressing Ctrl+V. If you forget and choose Paste, get rid of the marquee around the original cell range by pressing the Esc key.

Keeping pace with Paste Options

Right after you click the Paste button on the Home tab of the Ribbon or press Ctrl+V to paste cell entries that you copy (not cut) to the Clipboard, Excel displays a Paste Options button with the label, (Ctrl), to its immediate right at the end of the pasted range. When you click this drop-down button or press the Ctrl key, a palette similar to the one shown in Figure 4-9 appears with three groups of buttons (Paste, Paste Values, and Other Paste Options).

Figure 4-9: Clicking the Paste Options button or pressing the Ctrl key after completing a paste operation gives you this palette of paste options.



You can use these paste options to control or restrict the type of content and formatting that's included in the pasted cell range. The paste options (complete with the hot key sequences you can type to select them) on the Paste Options palette include:

- ✔ **Paste (P)**: Excel pastes all the stuff in the cell selection (formulas, formatting, you name it).
- ✔ **Formulas (F)**: Excel pastes all the text, numbers, and formulas in the current cell selection without their formatting.
- ✔ **Formulas & Number Formatting (O)**: Excel pastes the number formats assigned to the copied values along with their formulas.
- ✔ **Keep Source Formatting (K)**: Excel copies the formatting from the original cells and pastes this into the destination cells (along with the copied entries).
- ✔ **No Borders (B)**: Excel pastes all the stuff in the cell selection without copying any borders applied to its cell range.
- ✔ **Keep Source Column Widths (W)**: Excel makes the width of the columns in the destination range the same as those in the source range when it copies their cell entries.
- ✔ **Transpose (T)**: Excel changes the orientation of the pasted entries. For example, if the original cells' entries run down the rows of a single column of the worksheet, the transposed pasted entries will run across the columns of a single row.
- ✔ **Values (V)**: Excel pastes only the calculated results of any formulas in the source cell range.
- ✔ **Values & Number Formatting (A)**: Excel pastes the calculated results of any formulas along with all the formatting assigned to the labels, values, and formulas in the source cell range into the destination range. This means that all the labels and values in the destination range appear formatted just like the source range even though all the original formulas are lost and only the calculated values are retained.
- ✔ **Values & Source Formatting (E)**: Excel pastes the calculated results of any formulas along with all formatting assigned to the source cell range.
- ✔ **Formatting (R)**: Excel pastes only the formatting (and not the entries) copied from the source cell range to the destination range.
- ✔ **Paste Link (N)**: Excel creates linking formulas in the destination range so that any changes that you make to the entries in cells in the source range are immediately brought forward and reflected in the corresponding cells of the destination range.
- ✔ **Picture (U)**: Excel pastes only the pictures in the copied cell selection.
- ✔ **Linked Picture (I)**: Excel pastes a link to the pictures in the copied cell selection.



The options that appear on the Paste Options palette are context sensitive. This means that the particular paste options available on the palette depend directly upon the type of cell entries previously copied to the Office Clipboard.

Additionally, you can access this same palette of paste options by clicking the drop-down button that appears directly beneath the Paste button on the Ribbon instead of clicking the Paste Options button that appears at the end of the pasted range in the worksheet or pressing the Ctrl key on your keyboard.

Paste it from the Clipboard task pane

The Clipboard can store multiple cuts and copies from any program running under Windows not just Excel. In Excel, this means that you can continue to paste stuff from the Clipboard into a workbook even after finishing a move or copy operation (even when you do so by pressing the Enter key rather than using the Paste command).

To open the Clipboard in its own task pane to the immediate left of the Worksheet area (see Figure 4-10), click the dialog box launcher in the lower-right corner of the Clipboard group on the Ribbon's Home tab.

To paste an item from the Office Clipboard into a worksheet other than the one with the data last cut or copied onto it, click the item in the Clipboard task pane to paste it into the worksheet starting at the current position of the cell cursor.

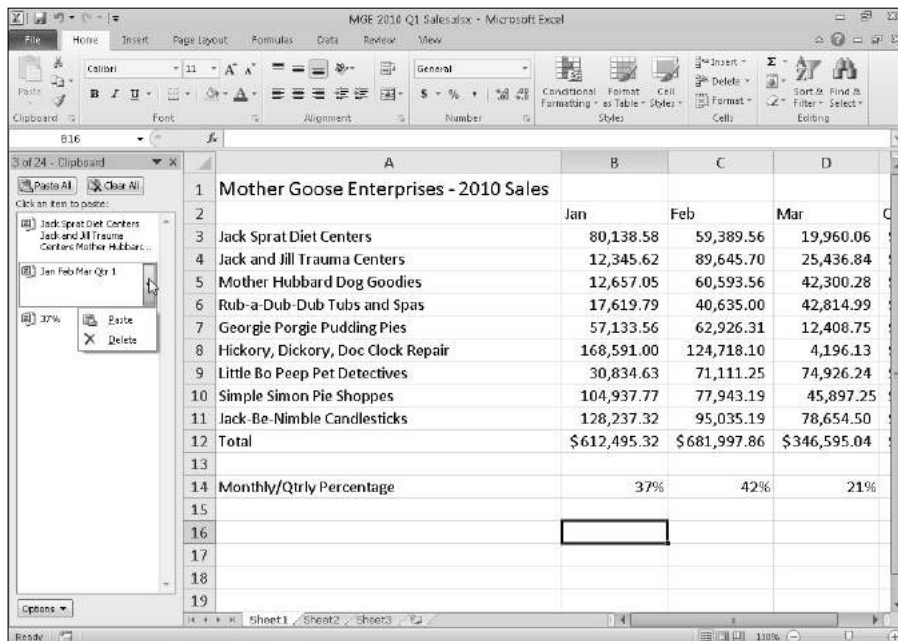


Figure 4-10:
The Clipboard task pane appears on the left side of the Excel Worksheet area.

You can paste all the items stored in the Office Clipboard into the current worksheet by clicking the Paste All button at the top of the Clipboard task pane. To clear the Office Clipboard of all the current items, click the Clear All button. To delete only a particular item from the Office Clipboard, position the mouse pointer over the item in the Clipboard task pane until its drop-down button appears. Click this drop-down button, and then choose Delete from the pop-up menu (refer to Figure 4-10).



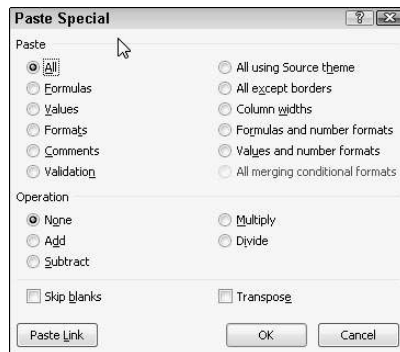
To have the Clipboard task pane appear automatically after making two cuts or copies to the Clipboard in an Excel workbook, click the Show Office Clipboard Automatically option on the task pane's Options button menu. To open the Clipboard task pane in the Excel program window by pressing Ctrl+CC, click Show Office Clipboard When Ctrl+C Pressed Twice on the task pane's Options button. Pressing Ctrl+CC only opens the task pane. You still have to click the Close button on the Office Clipboard to close the task pane.

So what's so special about Paste Special?

Normally, unless you fool around with the Paste Options (see the section “Keeping pace with Paste Options” earlier in this chapter), Excel copies all the information in the range of cells you selected: formatting, as well the formulas, text, and other values you enter. You can use the Paste Special command to specify which entries and formatting to use in the current paste operation. Many of the Paste Special options are also available on the Paste Options palette.

To paste particular parts of a cell selection while discarding others, click the drop-down button that appears at the bottom of the Paste command button on the Ribbon's Home tab. Then, click Paste Special on its drop-down menu to open the Paste Special dialog box shown in Figure 4-11.

Figure 4-11: Use the options in the Paste Special dialog box to control what part of the copied cell selection to include in the paste operation.



The options in the Paste Special dialog box include:

- ✓ **All** to paste all the stuff in the cell selection (formulas, formatting, you name it).
- ✓ **Formulas** to paste all the text, numbers, and formulas in the current cell selection without their formatting.
- ✓ **Values** to convert formulas in the current cell selection to their calculated values.
- ✓ **Formats** to paste only the formatting from the current cell selection, leaving the cell entries in the dust.
- ✓ **Comments** to paste only the notes that you attach to their cells (kind of like electronic self-stick notes — see Chapter 6 for details).
- ✓ **Validation** to paste only the data validation rules into the cell range that you set up with the Data Validation command (which enables you to set what value or range of values is allowed in a particular cell or cell range).
- ✓ **All Using Source Theme** to paste all the information plus the cell styles applied to the cells.
- ✓ **All Except Borders** to paste all the stuff in the cell selection without copying any borders you use there.
- ✓ **Column Widths** to apply the column widths of the cells copied to the Clipboard to the columns where the cells are pasted.
- ✓ **Formulas and Number Formats** to include the number formats assigned to the pasted values and formulas.
- ✓ **Values and Number Formats** to convert formulas to their calculated values and include the number formats you assign to all the pasted values.
- ✓ **All Merging Conditional Formats** to paste Conditional Formatting into the cell range.
- ✓ **None** to have Excel perform no mathematical operation between the data entries you cut or copy to the Clipboard and the data entries in the cell range where you paste.
- ✓ **Add** to add the data you cut or copy to the Clipboard and the data entries in the cell range where you paste.
- ✓ **Subtract** to subtract the data you cut or copy to the Clipboard from the data entries in the cell range where you paste.
- ✓ **Multiply** to multiply the data you cut or copy to the Clipboard by the data entries in the cell range where you paste.
- ✓ **Divide** to divide the data you cut or copy to the Clipboard by the data entries in the cell range where you paste.

- ✓ **Skip Blanks** check box when you want Excel to paste everywhere except for any empty cells in the incoming range. In other words, a blank cell cannot overwrite your current cell entries.
- ✓ **Transpose** check box when you want Excel to change the orientation of the pasted entries. For example, if the original cells' entries run down the rows of a single column of the worksheet, the transposed pasted entries will run across the columns of a single row.
- ✓ **Paste Link** button when you're copying cell entries and you want to establish a link between copies you're pasting and the original entries. That way, changes to the original cells automatically update in the pasted copies.

Let's Be Clear about Deleting Stuff

No discussion about editing in Excel would be complete without a section on getting rid of the stuff you put into cells. You can perform two kinds of deletions in a worksheet:

- ✓ **Clearing a cell:** Clearing just deletes or empties the cell's contents without removing the cell from the worksheet, which would alter the layout of the surrounding cells.
- ✓ **Deleting a cell:** Deleting gets rid of the whole kit and caboodle — cell structure along with all its contents and formatting. When you delete a cell, Excel has to shuffle the position of entries in the surrounding cells to plug up any gaps made by the action.

Sounding the all clear!

To get rid of just the contents of a cell selection rather than delete the cells and their contents, select the range of cells to clear and then simply press the Delete key.

If you want to get rid of more than just the contents of a cell selection, click the Clear button (the one with the eraser) in the Editing group on the Ribbon's Home tab and then click one of the following options on its drop-down menu:

- ✓ **Clear All:** Gets rid of all formatting and notes, as well as entries in the cell selection (Alt+HEA).
- ✓ **Clear Formats:** Deletes only the formatting from the cell selection without touching anything else (Alt+HEF).

- ✓ **Clear Contents:** Deletes only the entries in the cell selection just like pressing the Delete key (Alt+HEC).
- ✓ **Clear Comments:** Removes the notes in the cell selection but leaves everything else behind (Alt+HEM).
- ✓ **Clear Hyperlinks:** Removes the active hyperlinks (see Chapter 12) in the cell selection but leaves its descriptive text (Alt+HEL).

Get these cells outta here!

To delete the cell selection rather than just clear out its contents, select the cell range, click the drop-down button attached to the Delete command button in the Cells group of the Home tab, and then click Delete Cells on the drop-down menu (or press Alt+HDD). The Delete dialog box opens, showing options for filling in the gaps created when the cells currently selected are blotted out of existence:

- ✓ **Shift Cells Left:** This default option moves entries from neighboring columns on the right to the left to fill in gaps created when you delete the cell selection by clicking OK or pressing Enter.
- ✓ **Shift Cells Up:** Select this to move entries up from neighboring rows below.
- ✓ **Entire Row:** Select this to remove all the rows in the current cell selection.
- ✓ **Entire Columns:** Select this to delete all the columns in the current cell selection.

**TIP**

If you know that you want to shift the remaining cells to the left after deleting the cells in the current selection, you can simply click the Delete command button on the Home tab of the Ribbon. (This is the same thing as opening the Delete dialog box and then clicking OK when the default Shift Cells Left button is selected.)

To delete an entire column or row from the worksheet, you can select the column or row on the workbook window frame, right-click the selection, and then click Delete from the column's or row's shortcut menu.

**REMEMBER**

You can also delete entire columns and rows selected in the worksheet by clicking the drop-down button attached to the Delete command button on the Ribbon's Home tab and then clicking the Delete Sheet Columns (Alt+HDC) option or the Delete Sheet Rows option (Alt+HDR) on the drop-down menu.



Deleting entire columns and rows from a worksheet is risky business unless you are sure that the columns and rows in question contain nothing of value. Remember, when you delete an entire row from the worksheet, you delete *all information from column A through XFD* in that row (and you can see only a very few columns in this row). Likewise, when you delete an entire column from the worksheet, you delete *all information from row 1 through 1,048,576* in that column.

Staying in Step with Insert

For those inevitable times when you need to squeeze new entries into an already populated region of the worksheet, you can insert new cells in the area rather than go through all the trouble of moving and rearranging several individual cell ranges. To insert a new cell range, select the cells (many of which are already occupied) where you want the new cells to appear and then click the drop-down attached to the Insert command button in the Cells group of the Home tab and then click Insert Cells on the drop-down menu (or press Alt+HII). The Insert dialog box opens with the following option buttons:

- ✓ **Shift Cells Right:** Select this to shift existing cells to the right to make room for the ones you want to add before clicking OK or pressing Enter.
- ✓ **Shift Cells Down:** Use this default to instruct the program to shift existing entries down before clicking OK or pressing Enter.
- ✓ **Entire Row or Entire Column:** When you insert cells with the Insert dialog box, you can insert complete rows or columns in the cell range by selecting either of these radio buttons. You can also select the row number or column letter on the frame before you choose the Insert command.



If you know that you want to shift the existing cells to the right to make room for the newly inserted cells, you can simply click the Insert command button on the Ribbon's Home tab (this is the same thing as opening the Insert dialog box and then clicking OK when the Shift Cells Right button is selected).

Remember that you can also insert entire columns and rows in a worksheet by right-clicking the selection and then clicking Insert on the column's or row's shortcut menu.



As when you delete whole columns and rows, inserting entire columns and rows affects the entire worksheet, not just the part you see. If you don't know what's out in the hinterlands of the worksheet, you can't be sure how the insertion will affect — perhaps even sabotage — stuff (especially formulas) in the other unseen areas. I suggest that you scroll all the way out in both directions to make sure that nothing's out there.

Stamping Out Your Spelling Errors

If you're as good a speller as I am, you'll be relieved to know that Excel 2010 has a built-in spell checker that can catch and remove all those embarrassing little spelling errors. With this in mind, you no longer have any excuse for putting out worksheets with typos in the titles or headings.

To check the spelling in a worksheet, you have the following options:

- ✓ Click the Spelling command button on the Ribbon's Review tab
- ✓ Press Alt+RS
- ✓ Press F7

Any way you do it, Excel begins checking the spelling of all text entries in the worksheet. When the program comes across an unknown word, it displays the Spelling dialog box, similar to the one shown in Figure 4-12.



Figure 4-12:
Check your
spelling
from the
Spelling dia-
log box.

Excel suggests replacements for the unknown word shown in the Not in Dictionary text box with a likely replacement in the Suggestions list box of the Spelling dialog box. If that replacement is incorrect, you can scroll through the Suggestions list and click the correct replacement. Use the Spelling dialog box options as follows:

- ✓ **Ignore Once** and **Ignore All:** When Excel's spell check comes across a word its dictionary finds suspicious but you know is viable, click the Ignore Once button. If you don't want the spell checker to bother querying you about this word again, click the Ignore All button.
- ✓ **Add to Dictionary:** Click this button to add the unknown (to Excel) word — such as your name — to a custom dictionary so that Excel won't flag it again when you check the spelling in the worksheet later on.

- ✓ **Change:** Click this button to replace the word listed in the Not in Dictionary text box with the word Excel offers in the Suggestions list box.
- ✓ **Change All:** Click this button to change all occurrences of this misspelled word in the worksheet to the word Excel displays in the Suggestions list box.
- ✓ **AutoCorrect:** Click this button to have Excel automatically correct this spelling error with the suggestion displayed in the Suggestions list box (by adding the misspelling and suggestion to the AutoCorrect dialog box; for more, read Chapter 2).
- ✓ **Dictionary Language:** To switch to another dictionary (such as a United Kingdom English dictionary, or a French dictionary when checking French terms in a multilingual worksheet), click this drop-down button and then select the name of the desired language in the list.

Notice that the Excel spell checker not only flags words not found in its built-in or custom dictionary but also flags occurrences of double words in a cell entry (such as *total total*) and words with unusual capitalization (such as *NEw York* instead of *New York*). By default, the spell checker ignores all words with numbers and all Internet addresses. If you want it to ignore all words in uppercase letters as well, click the Options button at the bottom of the Spelling dialog box, and then select the Ignore Words in UPPERCASE check box before clicking OK.

You can check the spelling of just a particular group of entries by selecting the cells before you click the Spelling command button on the Review tab of the Ribbon or press F7.

Stamping Out Errors with Text to Speech

The good news is that Excel 2010 still supports the Text to Speech feature introduced in Excel 2003. This feature enables your computer to read aloud any series of cell entries in the worksheet. By using Text to Speech, you can check your printed source while the computer reads aloud the values and labels that you've actually entered — a real nifty way to catch and correct errors that may otherwise escape unnoticed.



The Text to Speech translation feature requires no prior training or special microphones: All that's required is a pair of speakers or headphones connected to your computer.

Now for the bad news: Text to Speech is not available from any of the tabs on the Ribbon. The only way to access Text to Speech is by adding its Speak Cells command buttons as custom buttons on a custom tab on the Ribbon or as custom buttons on the Quick Access toolbar as follows:

- 1. Click the Customize Quick Access Toolbar button at the very end of the Quick Access toolbar and then click More Commands on its menu.**

The Quick Access Toolbar tab of the Excel Options dialog box opens.

- 2. Click Commands Not in the Ribbon on the Choose Commands From drop-down menu and scroll down until you see the Speak Cells commands.**

The Text to Speech command buttons include Speak Cells, Speak Cells – Stop Speaking Cells, Speak Cells by Columns, Speak Cells by Rows, and Speak Cells on Enter.

- 3. Click the Speak Cells button in the Choose Commands From list box on the left and then click the Add button to add it to the bottom of the Customize Quick Access Toolbar list box on the right.**

- 4. Repeat Step 3 until you've added the remaining Text to Speech buttons to the Quick Access toolbar: Speak Cells – Stop Speaking Cells, Speak Cells by Columns, Speak Cells by Rows, and Speak Cells on Enter.**

If you want to reposition the Text to Speech buttons on the Quick Access toolbar, select each button in the Customize Quick Access Toolbar list and then move it left on the bar by clicking the Move Up button or right by clicking Move Down. If you want to set off the Text to Speech buttons as a separate group on the Quick Access toolbar, add a vertical separator ahead of the Speak Cells command button (and following the Speak Cells on Enter button if you have buttons not related to the Text to Speech function that follow on the Quick Access toolbar).

- 5. Click the OK button to close the Excel Options dialog box.**

Figure 4-13 shows the Quick Access toolbar in my Excel 2010 program window after I moved the toolbar down so that it appears below the Ribbon and added the Speak Cells command buttons to it.

After adding the Text to Speech commands as custom Speak Cells buttons on the Quick Access toolbar, you can use them to corroborate spreadsheet entries and catch those hard-to-spot errors as follows:

- 1. Select the cells in the worksheet whose contents you want read aloud by Text to Speech.**
- 2. Click the Speak Cells custom button on the Quick Access toolbar to have the computer read the entries in the selected cells.**

By default, the Text to Speech feature reads the contents of each cell in the cell selection by reading down each column and then across the

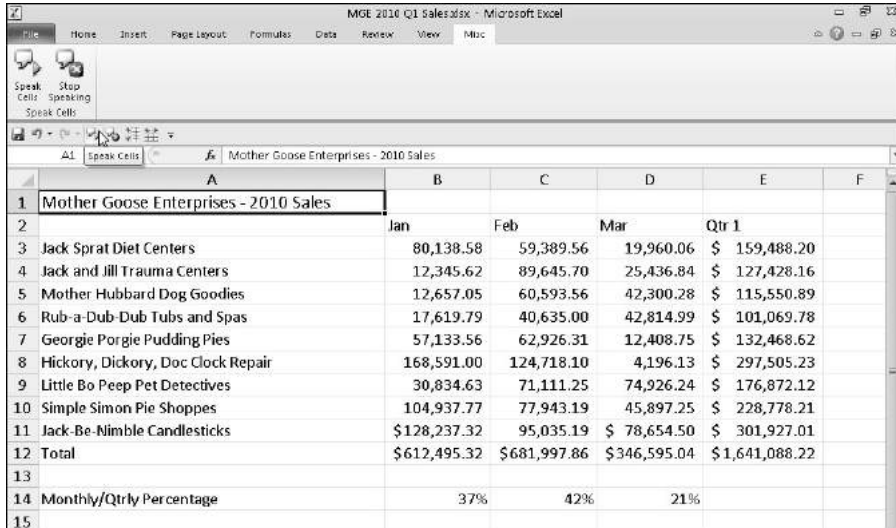
rows. If you want Text to Speech to read across the rows and then down the columns, click the Speak Cells by Rows button on the Quick Access toolbar (the button with the two opposing horizontal arrows).

3. To have the Text to Speech feature read each cell entry while you press the Enter key (at which point the cell cursor moves down to the next cell in the selection), click the Speak Cells on Enter custom button (the button with the curved arrow Enter symbol) on the Quick Access toolbar.

As soon as you click the Speak Cells on Enter button, the computer tells you, “Cells will now be spoken on Enter.” After selecting this option, you need to press Enter each time that you want to hear an entry read to you.

4. To pause the Text to Speech feature when you’re not using the Speak Cells on Enter option (Step 3) and you locate a discrepancy between what you’re reading and what you’re hearing, click the Stop Speaking button (the Speak Cells group button with the x).

Figure 4-13: After adding the Speak Cells command buttons to the Quick Access toolbar, you can use them to check cell entries audibly.



Mother Goose Enterprises - 2010 Sales					
	Jan	Feb	Mar	Qtr 1	
Jack Sprat Diet Centers	80,138.58	59,389.56	19,960.06	\$	159,488.20
Jack and Jill Trauma Centers	12,345.62	89,645.70	25,436.84	\$	127,428.16
Mother Hubbard Dog Goodies	12,657.05	60,593.56	42,300.28	\$	115,550.89
Rub-a-Dub-Dub Tubs and Spas	17,619.79	40,635.00	42,814.99	\$	101,069.78
Georgie Porgie Pudding Pies	57,133.56	62,926.31	12,408.75	\$	132,468.62
Hickory, Dickory, Doc Clock Repair	168,591.00	124,718.10	4,196.13	\$	297,505.23
Little Bo Peep Pet Detectives	30,834.63	71,111.25	74,926.24	\$	176,872.12
Simple Simon Pie Shoppes	104,937.77	77,943.19	45,897.25	\$	228,778.21
Jack-Be-Nimble Candlesticks	\$128,237.32	95,035.19	\$ 78,654.50	\$	301,927.01
Total	\$612,495.32	\$681,997.86	\$ 346,595.04	\$	1,641,088.22
Monthly/Qtrly Percentage		37%	42%		21%



After you click the Speak Cells on Enter button on the Quick Access toolbar, the computer speaks *only* each new cell entry that you complete by pressing the Enter key (which moves the cell cursor down one row) rather than some other method, such as clicking the Enter button on the Formula bar or pressing the ↓ key.



You can also add any or all the Text to Speech buttons to a custom group on a custom tab on the Ribbon (for example, the Speak Cells group on the custom Misc tab in Figure 4-13 contains the Speak Cells and Stop Speaking buttons).

Chapter 5

Printing the Masterpiece

In This Chapter

- ▶ Previewing pages in Page Layout View and printouts in Backstage View
 - ▶ Quick Printing from the Quick Access toolbar
 - ▶ Printing all the worksheets in a workbook
 - ▶ Printing just some of the cells in a worksheet
 - ▶ Changing page orientation
 - ▶ Printing the whole worksheet on a single page
 - ▶ Changing margins for a report
 - ▶ Adding a header and footer to a report
 - ▶ Printing column and row headings as print titles on every page of a report
 - ▶ Inserting page breaks in a report
 - ▶ Printing the formulas in your worksheet
-

For most people, getting data down on paper is what spreadsheets are all about (all the talk about a so-called paperless office to the contrary). Everything — all the data entry, all the formatting, all the formula checking, all the things you do to get a spreadsheet ready — is really just preparation for printing its information.

In this chapter, you find out just how easy it is to print reports with Excel 2010. Thanks to the program's new Print panel in Backstage View (Alt+FP), its Page Layout worksheet view, and its handy Page Layout tab on the Ribbon, you discover how to produce top-notch reports the first time you send the document to the printer (instead of the second or even the third time around).

The only trick to printing a worksheet is getting used to the paging scheme and learning how to control it. Many of the worksheets you create with Excel are not only longer than one printed page but also wider. Word processors, such as Word 2010, page the document only vertically; they won't let you

create a document wider than the page size you're using. Spreadsheet programs like Excel 2010, however, often have to break up pages both vertically and horizontally to print a worksheet document (a kind of tiling of the print job, if you will).

When breaking a worksheet into pages, Excel first pages the document vertically down the rows in the first columns of the print area (just like a word processor). After paging the first columns, the program pages down the rows of the second set of columns in the print area. Excel pages down and then over until the entire document included in the current print area (which can include the entire worksheet or just sections) is paged.

When paging the worksheet, Excel doesn't break up the information within a row or column. If not all the information in a row will fit at the bottom of the page, the program moves the entire row to the following page. If not all the information in a column will fit at the right edge of the page, the program moves the entire column to a new page. (Because Excel pages down and then over, the column may not appear on the next page of the report.)

You can deal with such paging problems in several ways, and in this chapter, you see all of them! After you have these page problems under control, printing is a proverbial piece of cake.

Taking a Gander at the Pages in Page Layout View

Excel 2010's Page Layout View gives you instant access to the paging of the current worksheet. Activate this feature by clicking the Page Layout View button (the center one) to the immediate left of the Zoom slider on the Status bar or by clicking the Page Layout View command button on the Ribbon's View tab (Alt+WP). As you can see in Figure 5-1, when you switch to Page Layout View, Excel adds horizontal and vertical rulers to the column letter and row number headings. In the Worksheet area, this view shows the margins for each printed page, any headers and footers defined for the report, and the breaks between each page. (Often, you have to use the Zoom slider to reduce the screen magnification to display the page breaks on the screen.)



To see all the pages in the active worksheet, drag the slider button in the Zoom slider on the Status bar to the left until you decrease the screen magnification sufficiently to display all the pages of data.

Case No	Last Name	First Name	Street	City	State	Zip	Status	Hours	Rate	Total
101-910	Harvey	Scott	12 Elm Street	Scholar	MN	58764	Active	250	75.00	\$1
101-014	Andersen	Hans	341 The Shadow	Scholar	MN	58764	Closed	175	75.00	\$1
103-033	Appleseed	Johnny	6789 Fruitree Tr	Along The Way	SD	69017	Active	321	125.00	\$4
102-013	Baggins	Bingo	99 Hobbithole	Shire	ME	04047	Active	100	125.00	\$1
103-007	Baun	L. Frank	447 Toto Too Rd	Dz	KS	65432	Closed	421	125.00	\$5
104-026	Brown	Charles	55 Flat Plains	Saltewater	UT	84001	Active	575	125.00	\$7
101-061	Bryant	Michael	326 Chef's Lane	Paris	Tx	79705	Active	600	100.00	\$6
101-038	Cassidy	Butch	Sundance Kidde	Hole In Wall	CO	80477	Closed	345.5	75.00	\$2
102-065	Cinderella	Poore	8 Lucky Maiden Way	Oxford	TN	07557	Closed	800	75.00	\$6
103-064	Cupid	Eros	97 Mount Olympus	Greece	CT	08331	Active	123.5	75.00	\$3
103-022	Dragon	Kal	2 Pleistocene Era	Ann's World	ID	00001	Active	459.2	75.00	\$3
104-011	Eaters	Big	444 Big Pigs Court	Dogtown	AZ	65257	Closed	760	125.00	\$5
106-012	Foliage	Red	45 Maple Syrup	Waffle	VT	05452	Active	205	125.00	\$2
102-020	Franklin	Ben	1789 Constitution	Jefferson	WV	26179	Active	169.5	75.00	\$1
104-019	Fuddle	Elmer	9 Warner Way	Hollywood	CA	93461	Active	463.5	125.00	\$5
102-062	Gearing	Shane	1 Gunfighter's End	Lala Land	CA	90069	Active	902.5	125.00	\$11
103-043	Gepp	Gepp	3055 Condit	Mulder	WV	26043	Closed	353	125.00	\$4

Figure 5-1:
Viewing a
spreadsheet
in Page
Layout
View.



Excel displays rulers using the default units for your computer (inches on a U.S. computer and centimeters on a European machine). To change the units, open the Advanced tab of the Excel Options dialog box (File→Options→Advanced or Alt+F1A) and then select the appropriate unit (Inches, Centimeters, or Millimeters) on the Ruler Units drop-down menu in the Display section.

The Ruler check box on the View tab acts as a toggle switch so that the first time you click this button, Excel removes the rulers from the Page Layout View, and the second time you click this button, the program adds them again.

Checking and Printing a Report from the Print Panel

To save wasted paper and your sanity, print your worksheet directly from the Print panel in Backstage View by clicking File→Print (or simply pressing Ctrl+P or Ctrl+F2). As you see in Figure 5-2, the Print panel shows you at-a-glance your current print settings along with a preview of the first page of the printout.

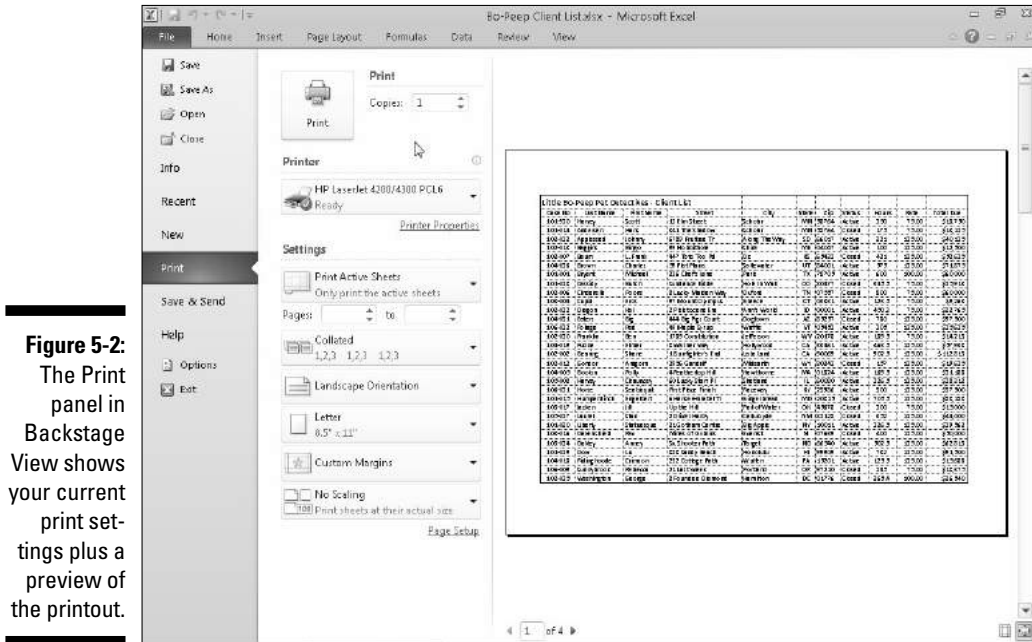


Figure 5-2:
The Print panel in Backstage View shows your current print settings plus a preview of the printout.

You can use the Print Preview feature in the Print panel before you print any worksheet, section of worksheet, or entire workbook. Because of the peculiarities in paging worksheet data, you often need to check the page breaks for any report that requires more than one page. The print preview area in the Print panel shows you exactly how the worksheet data will page when printed. If necessary, you can return to the worksheet where you can make changes to the page settings from the Page Layout tab on the Ribbon before sending the report to the printer when everything looks okay.

When Excel displays a full page in the print preview area, you can barely read its contents. To increase the view to actual size to verify some of the data, click the Zoom to Page button in the lower-right corner of the Print panel. Check out the difference in Figure 5-3 — you can see what the first page of the four-page report looks like after I zoom in by clicking this Zoom to Page button.

After you enlarge a page to actual size, use the scroll bars to bring new parts of the page into view in the print preview area. To return to the full-page view, click the Zoom to Page button a second time to deselect it.

Excel indicates the number of pages in a report at the bottom of the print preview area. If your report has more than one page, you can view pages that follow by clicking the Next Page button to the right of the final page number. To review a page you've already seen, back up a page by clicking the Previous Page button to the left of the first page number. (The Previous Page button is gray if you're on the first page.)

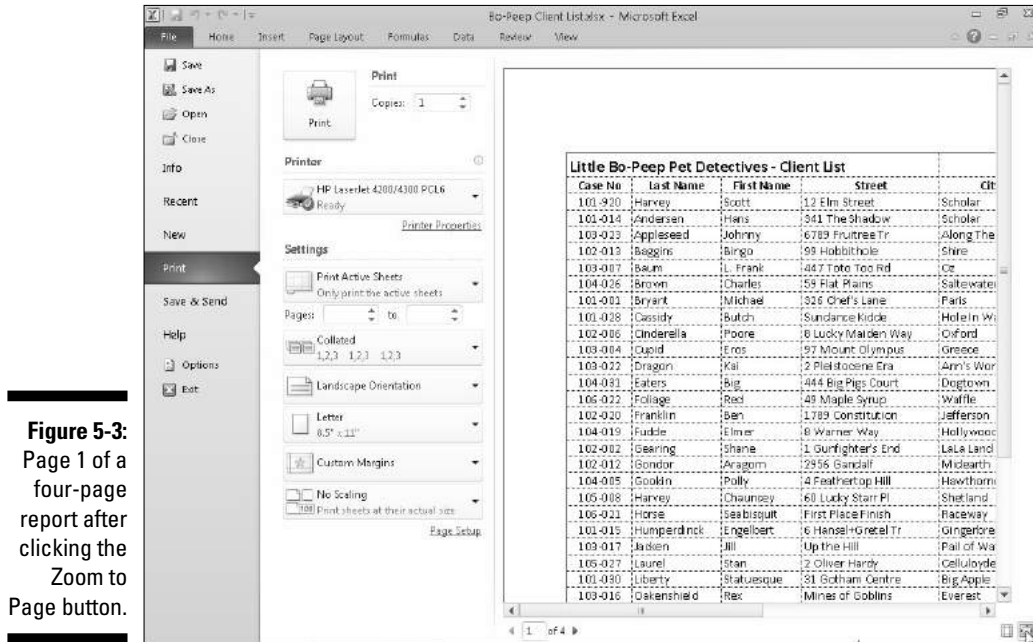


Figure 5-3: Page 1 of a four-page report after clicking the Zoom to Page button.



To display markers indicating the current left, right, top and bottom margins along with the column widths, select the Show Margins check box to the immediate left of the Zoom to Page button. You can then modify the column widths as well as the page margins by dragging the appropriate marker (see “Massaging the margins” later in this chapter for details).

When you finish previewing the report, the Print panel offers you the following options for changing certain print settings before you send it to the printer:

- **Print** button with the **Number of Copies** combo box: Use this button to print the spreadsheet report using the current print settings listed on the panel. Use the combo box to indicate the number of copies you want when you need multiple copies printed.
- **Printer** drop-down button: Use this button to select a new printer or fax to send the spreadsheet report to when more than one device is installed. (Excel automatically displays the name of the printer that’s installed as the default printer in Windows.)
- **Settings** drop-down buttons: These include a **Print What** drop-down button with attendant **Pages** combo boxes: Use the Print What drop-down button to choose between printing only the active (selected) worksheets in the workbook (the default), the entire workbook, the current cell selection in the current worksheet, and the currently selected table in the current worksheet. Use the combo boxes to restrict what’s printed to just the range of pages you enter in these boxes or select with their spinner buttons.

Beneath the combo boxes, you find drop-down list buttons to print on both sides of each page in the report, collate the pages of the report, and switch the page orientation from Portrait (aligned with the short side) to Landscape (aligned with the long side). Additionally, you can select a paper size other than the standard 8.5" x 11" letter, and customize the size of the report's margins (top, bottom, left, and right, as well as the margins for any header and footer on the page).

Printing Just the Current Worksheet

As long as you want to use Excel's default print settings to print all the cells in the current worksheet, printing in Excel 2010 is a breeze. Simply add the Quick Print button to the Quick Access toolbar (by clicking the Customize Quick Access Toolbar button and then clicking Quick Print on its drop-down menu).

After adding the Quick Print button to the Quick Access toolbar, you can use this button to print a single copy of all the information in the current worksheet, including any charts and graphics — but not including comments you add to cells. (See Chapter 6 for details about adding comments to your worksheet and Chapter 10 for details about charts and graphics.)

Understanding and using the print area

Excel includes a special printing feature called Print Area. Click Print Area⇨Set Print Area on the Ribbon's Page Layout tab or press Alt+PRS to define any cell selection on a worksheet as the print area. After you define the print area, Excel then prints this cell selection anytime you print the worksheet (by using either the Quick Print button, if you've added it to the Quick Access toolbar or by using the File⇨Print command or its Ctrl+P shortcut).

After you define the print area, its cell range is the only one you can print (regardless of what other Print What option you select in the Settings section of the Print panel). That is, unless you click the Ignore Print Area option at the very bottom of the Print What drop-down list or clear the print area. To clear the print area

(and return to the printing defaults that Excel establishes in the Print dialog box), click Print Area⇨Clear Print Area on the Page Layout tab or simply press Alt+PRC.

You can also define and clear the print area from the Sheet tab of the Page Setup dialog box by clicking the dialog box launcher in the Page Setup group on the Ribbon's Page Layout tab. To define the print area from this dialog box, click the Print Area text box on the Sheet tab to insert the cursor and then select the cell range or ranges in the worksheet (remembering that you can reduce the Page Setup dialog box to just this text box by clicking the Print Area Collapse/Expand button). To clear the print area from this dialog box, select the cell addresses in the Print Area text box and press the Delete key.

When you click the Quick Print button, Excel routes the print job to the Windows print queue, which acts like a middleman and sends the job to the printer. While Excel sends the print job to the print queue, Excel displays a Printing dialog box to inform you of its progress (displaying such updates as *Printing Page 2 of 3*). After this dialog box disappears, you are free to go back to work in Excel. To stop the printing while the job is still being sent to the print queue, click the Cancel button in the Printing dialog box.

If you don't realize that you want to cancel the print job until after Excel finishes shipping it to the print queue (that is, while the Printing dialog box appears onscreen), you must:

- 1. Click the printer icon in the Notification area at the far right of the Windows taskbar (to the immediate left of the current time) with the secondary mouse button to open its shortcut menu.**

This printer icon displays the ScreenTip *1 document(s) pending for so-and-so*. For example, when I'm printing, this message reads *1 document(s) pending for Greg* when I position the mouse pointer over the printer icon.

- 2. Right-click the printer icon and then select the Open All Active Printers command from its shortcut menu.**

This opens the dialog box for the printer with the Excel print job in its queue (as described under the Document Name heading in the list box).

- 3. Select the Excel print job that you want to cancel in the list box of your printer's dialog box.**
- 4. Choose Document->Cancel from the menu bar and then click Yes to confirm you want to cancel the print job.**
- 5. Wait for the print job to disappear from the queue in the printer's dialog box and then click the Close button to return to Excel.**

My Page Was Set Up!

About the only thing the slightest bit complex in printing a worksheet is figuring out how to get the pages right. Fortunately, the command buttons in the Page Setup group on the Ribbon's Page Layout tab give you a great deal of control over what goes on which page.

Three groups of buttons on the Page Layout tab help you get your page settings exactly as you want them. The Page Setup group, the Scale to Fit group, and the Sheet Options group are described in the following sections.



To see the effect of changes you make in the Worksheet area, put the worksheet into Page Layout View by clicking the Page Layout button on the Status bar while you work with the command buttons in the Page Setup, Scale to Fit, and Sheet Options groups on the Page Layout tab of the Ribbon.

Using the buttons in the Page Setup group

The Page Setup group of the Page Layout tab contains the following important command buttons:

- ✓ **Margins** button to select one of three preset margins for the report or to set custom margins on the Margins tab of the Page Setup dialog box. (See “Massaging the margins” that follows in this chapter.)
- ✓ **Orientation** button to switch between Portrait and Landscape mode for printing. (See the “Getting the lay of the landscape” section, later in this chapter.)
- ✓ **Size** button to select one of the preset paper sizes, set a custom size, or change the printing resolution or page number on the Page tab of the Page Setup dialog box.
- ✓ **Print Area** button to set and clear the print area. (See the nearby “Understanding and using the print area” sidebar.)
- ✓ **Breaks** button to insert or remove page breaks. (See “Solving Page Break Problems” later in this chapter.)
- ✓ **Background** button to open the Sheet Background dialog box where you can select a new graphic image or photo to use as a background for the current worksheet. (This button changes to Delete Background as soon as you select a background image.)
- ✓ **Print Titles** button to open the Sheet tab of the Page Setup dialog box where you can define rows of the worksheet to repeat at the top and columns of the worksheet to repeat at the left as print titles for the report. (See “Putting out the print titles” later in this chapter.)

Massaging the margins

The Normal margin settings that Excel applies to a new report uses standard top, bottom, left, and right margins of $\frac{3}{4}$ inch with just over a $\frac{1}{4}$ inch separating the header and footer from the top and bottom margin, respectively.

In addition to the Normal margin settings, the program enables you to select two other standard margins from the Margins button’s drop-down menu:

- ✓ **Wide margins** with 1-inch top, bottom, left, and right margins and $\frac{1}{2}$ inch separating the header and footer from the top and bottom margin, respectively.

- ✓ **Narrow** margins with a top and bottom margin of $\frac{3}{4}$ inch and a left and right margin of $\frac{1}{4}$ inch with 0.3 inch separating the header and footer from the top and bottom margin, respectively.

Frequently, you find yourself with a report that takes up a full printed page and then just enough to spill over onto a second, mostly empty, page. To squeeze the last column or the last few rows of the worksheet data onto Page 1, try selecting Narrow on the Margins button's drop-down menu.

If that doesn't do it, you can try manually adjusting the margins for the report from the Margins tab of the Page Setup dialog box or by dragging the margin markers in the preview area of the Print panel in the Backstage View (Press Ctrl+P and click the Show Margins button). To get more columns on a page, try reducing the left and right margins. To get more rows on a page, try reducing the top and bottom margins.

To open the Margins tab of the Page Setup dialog box (shown in Figure 5-4), click Custom Margins on the Margins button's drop-down menu. There, enter the new settings in the Top, Bottom, Left, and Right text boxes — or select the new margin settings with their respective spinner buttons.

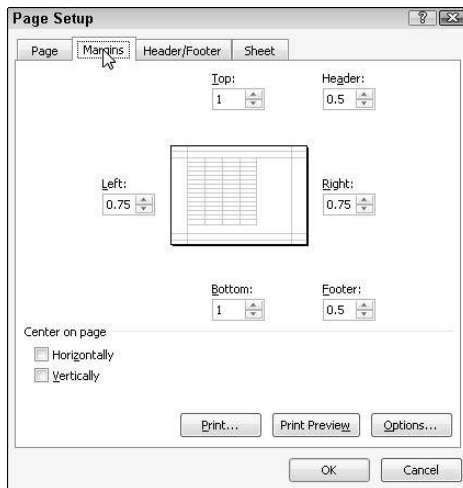


Figure 5-4: Adjust your report margins from the Margins tab in the Page Setup dialog box.



Select one or both Center on Page options in the Margins tab of the Page Setup dialog box (refer to Figure 5-4) to center a selection of data (that takes up less than a full page) between the current margin settings. In the Center on Page section, select the Horizontally check box to center the data between the left and right margins. Select the Vertically check box to center the data between the top and bottom margins.

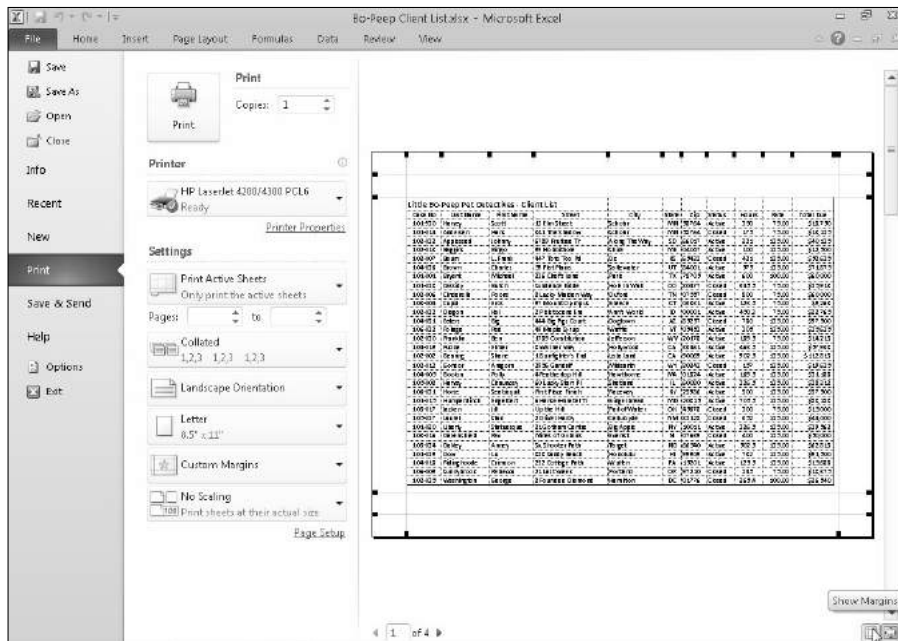
When you select the Show Margins button in the Print panel in the Backstage View (Ctrl+P) to modify the margin settings directly, you can also massage the column widths as well as the margins. (Refer to Figure 5-5.) To change one of the margins, position the mouse pointer on the desired margin marker (the pointer shape changes to a double-headed arrow) and drag the marker with your mouse in the appropriate direction. When you release the mouse button, Excel redraws the page, using the new margin setting. You may gain or lose columns or rows, depending on what kind of adjustment you make. Changing the column widths is the same story: Drag the column marker to the left or right to decrease or increase the width of a particular column.

Getting the lay of the landscape

The drop-down menu attached to the Orientation button in the Page Setup group of the Ribbon's Page Layout tab contains two options:

- ✓ **Portrait** (the default) where the printing runs parallel to the short edge of the paper
- ✓ **Landscape** where the printing runs parallel to the long edge of the paper

Figure 5-5:
Drag a marker to adjust its margin in the page preview area of the Print panel when the Show Margins button is selected.



Because many worksheets are far wider than they are tall (such as budgets or sales tables that track expenditures over 12 months), you may find that wider worksheets page better if you switch the orientation from Portrait mode (which accommodates fewer columns on a page because the printing runs parallel to the short edge of the page) to Landscape mode.

In Figure 5-6, you can see the Print Preview window with the first page of a report in Landscape mode in the Page Layout View. For this report, Excel can fit three more columns of information on this page in Landscape mode than it can in Portrait mode. However, because this page orientation accommodates fewer rows, the total page count for this report increases from two pages in Portrait mode to four pages in Landscape mode.

Putting out the print titles

Excel's Print Titles feature enables you to print particular row and column headings on each page of the report. Print titles are important in multipage reports where the columns and rows of related data spill over to other pages that no longer show the row and column headings on the first page.



Don't confuse print titles with the header of a report (see "From Header to Footer" later in this chapter). Even though both are printed on each page, header information prints in the top margin of the report; print titles always appear in the body of the report — at the top, in the case of rows used as print titles, and on the left, in the case of columns.

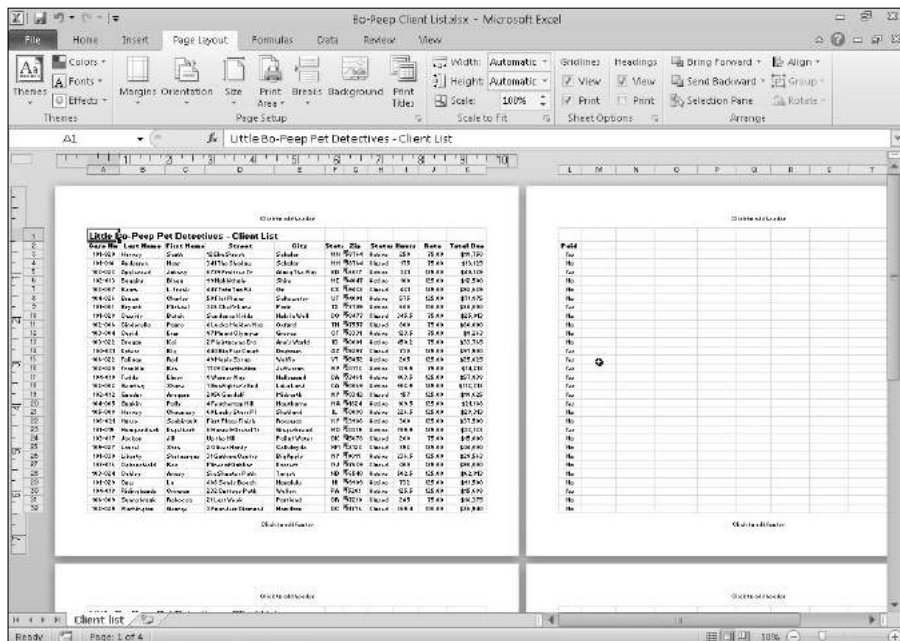


Figure 5-6: A Landscape mode report in Page Layout View.

To designate rows and/or columns as the print titles for a report, follow these steps:

1. Click the **Print Titles** button on the **Page Layout** tab on the Ribbon or press **Alt+PI**.

The Page Setup dialog box appears with Sheet tab selected (refer to Figure 5-7).

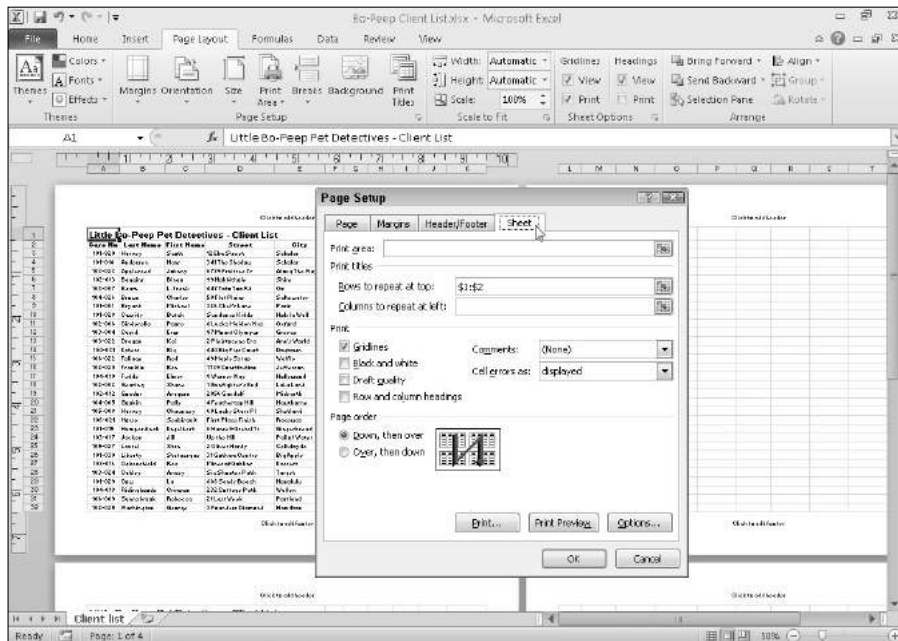
To designate worksheet rows as print titles, go to Step 2a. To designate worksheet columns as print titles, go to Step 2b.

- 2a. Select the **Rows to Repeat at Top** text box and then drag through the rows with information you want to appear at the top of each page in the worksheet below. If necessary, reduce the Page Setup dialog box to just the Rows to Repeat at Top text box by clicking the text box's Collapse/Expand button.

For the example shown in Figure 5-7, I clicked the Collapse/Expand button associated with the Rows to Repeat at Top text box and then dragged through rows 1 and 2 in column A of the Little Bo Peep Pet Detectives – Client List worksheet. Excel entered the row range \$1:\$2 in the Rows to Repeat at Top text box.

Excel indicates the print-title rows in the worksheet by placing a dotted line (that moves like a marquee) on the border between the titles and the information in the body of the report.

Figure 5-7: Specify the rows and columns to use as print titles on the Sheet tab of the Page Setup dialog box.



* * * Free Preview End * * *

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