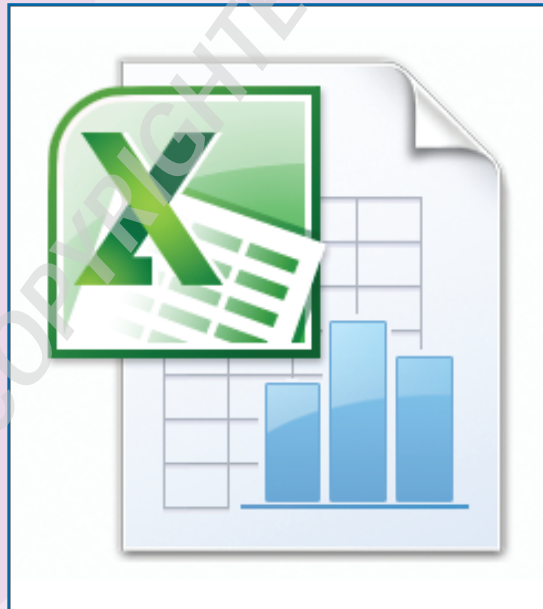# Working with Excel

You use Microsoft Excel to create *spreadsheets*, which are documents that enable you to manipulate numbers and formulas to quickly create powerful mathematical, financial, and statistical models. In this chapter you learn about Excel and you find out the kinds of tasks you can perform with Excel. You also learn how to start the program, and you take a tour of the program's major features. This chapter also shows you how to work with Excel Ribbon and the Ribbon's galleries, how to customize the Ribbon and the Quick Access Toolbar, how to work with smart tags, and how to customize the view and other aspects of the program.
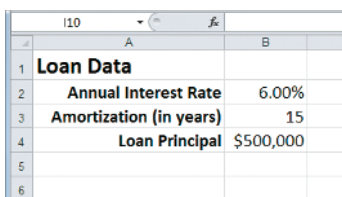
Getting to Know Excel

Working with Excel involves two basic tasks: building a spreadsheet and then manipulating the data on the spreadsheet. Building a spreadsheet involves adding data, formulas, and functions. Manipulating data involves calculating totals, working with series, creating tables for your data, and visualizing data in charts.

This section just gives you an overview of these tasks. You learn about each task in greater detail as you work through the book.
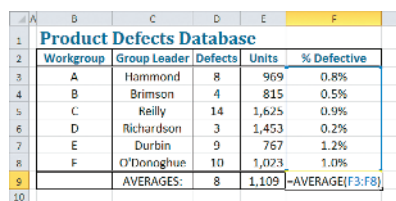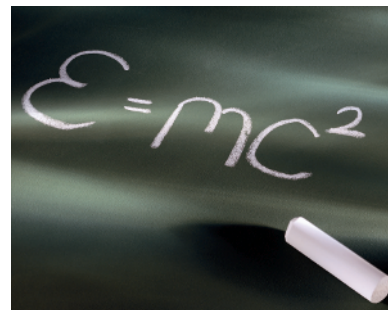
Build a Spreadsheet

Add Data

You can insert text, numbers, and other characters into any cell in the spreadsheet. Click the cell that you want to work with and then type your data in the Formula bar. This is the large text box above the column letters. Your typing appears in the cell that you selected. When you are done, press Enter. To edit existing cell data, click the cell and then edit the text in the Formula bar.

Add a Formula

A *formula* is a collection of numbers, cell addresses, and mathematical operators that performs a calculation. In Excel, you enter a formula in a cell by typing an equal sign (**=**) and then the formula text. For example, the formula =B1-B2 subtracts the value in cell B2 from the value in cell B1.

Add a Function

A *function* is a predefined formula that performs a specific task. For example, the AVERAGE function calculates the average of a list of numbers, and the PMT function calculates a loan or mortgage payment. You can use functions on their own, preceded by =, or as part of a larger formula. Click **Insert Function** (f_x) to see a list of the available functions.

Manipulate Data

Calculate Totals Quickly

If you just need a quick sum of a list of numbers, click a cell below the numbers and then click the **Sum** button (Σ), which is available in the Home tab of Excel's Ribbon. In Excel, you can also select the cells that you want to sum, and their total appears in the status bar.

Fill a Series

Excel enables you to save time by completing a series of values automatically. For example, if you need to enter the numbers 1 to 100 in consecutive cells, you can enter just the first few numbers, select the cells, and then click and drag the lower right corner to fill in the rest of the numbers. Most programs also fill in dates, as well as the names for weekdays and months.
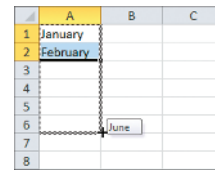
Manage Tables

The row-and-column format of a spreadsheet makes the program suitable for simple databases called *tables*. Each column becomes a field in the table, and each row is a record. You can sort the records, filter the records to show only certain values, and add subtotals.

Add a Chart

A *chart* is a graphic representation of spreadsheet data. As the data in the spreadsheet changes, the chart also changes to reflect the new numbers. Excel offers a wide variety of charts, including bar charts, line charts, and pie charts.
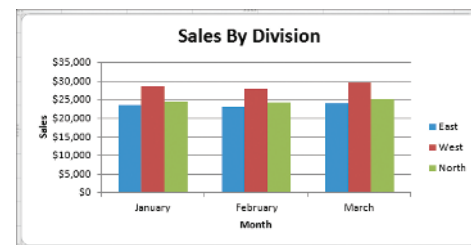
Start Excel

Before you can perform tasks such as adding data and building formulas, you must first start Excel. This brings the Excel window onto the Windows desktop, and you can then begin using the program. This task and the rest of the book assume that you have already installed Excel 2010 on your computer.

When you have finished your work with Excel, you should shut down the program. This reduces clutter on the desktop and in the taskbar, and it also conserves memory and other system resources.
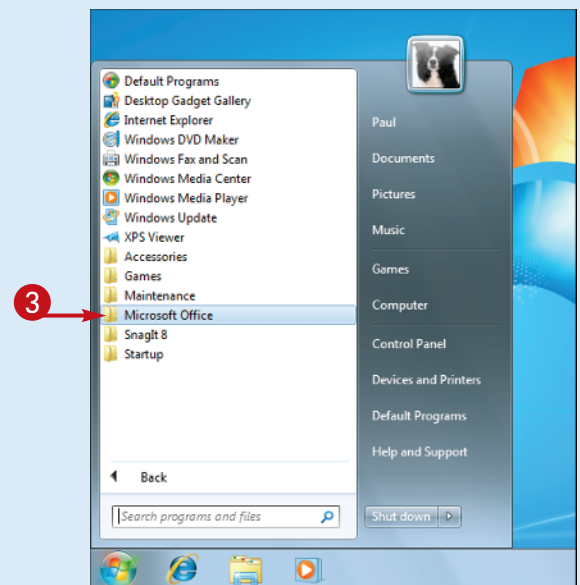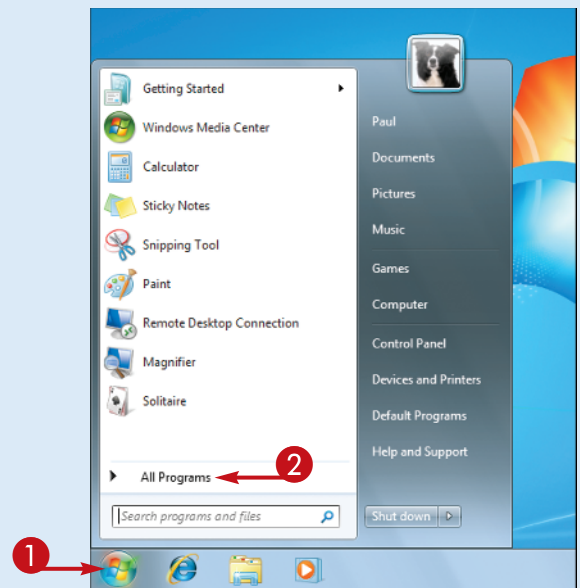
Start Excel

1 Click **Start**.

The Start menu appears.

2 Click **All Programs**.

The App Programs menu appears.

3 Click **Microsoft Office**.

The Microsoft Office menu appears.

④ Click **Microsoft Excel 2010**.
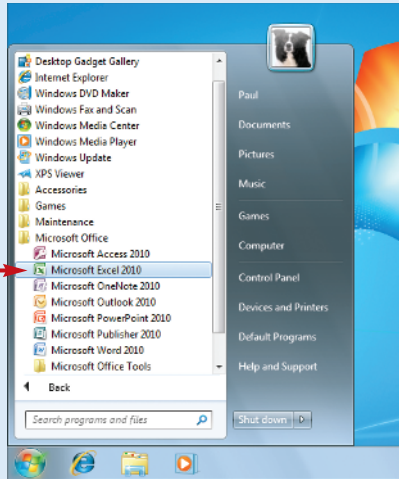
The Microsoft Excel window appears on the desktop.

Note: *When you are finished with Excel, close the program by clicking the* ***File*** *tab and then clicking* ***Exit****.*
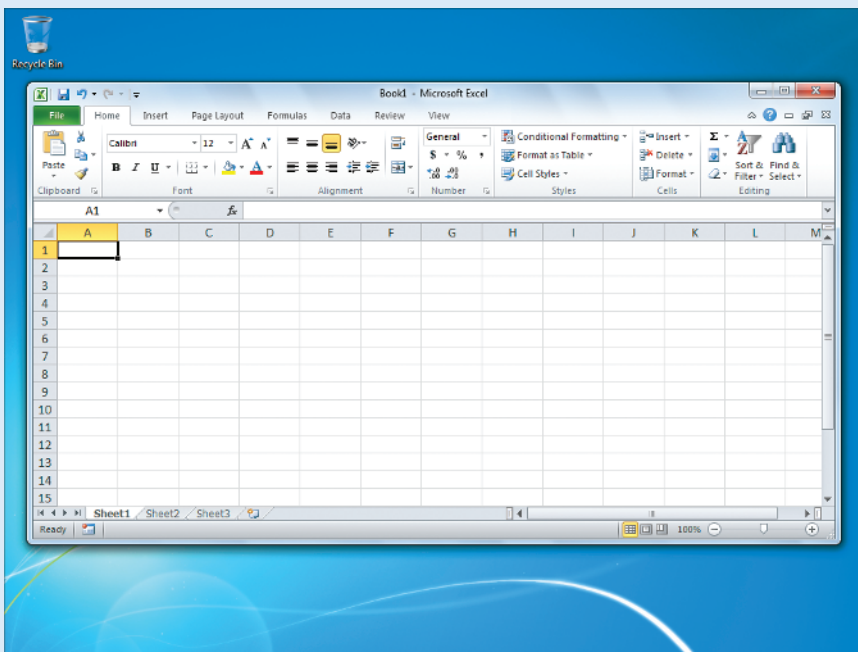
Simplify It

Are there faster methods I can use to start Excel?
Yes. After you have used Excel a few times, it should appear on the main Start menu in the list of your most-used programs. If so, you can click that icon to start the program. You can also force the Excel icon onto the Start menu by following Steps **1** to **3**, right-clicking the **Microsoft Excel 2010** icon, and then clicking **Pin to Start Menu**. If you are using Windows 7, you can also click **Pin to Taskbar** to add the Excel icon to the taskbar.

Tour the Excel Window

To get up to speed quickly with Excel, it helps to understand the various elements of the Excel window. These include standard window elements such as the title bar and status bar, as well as Office-specific elements such as the Ribbon and the File tab.
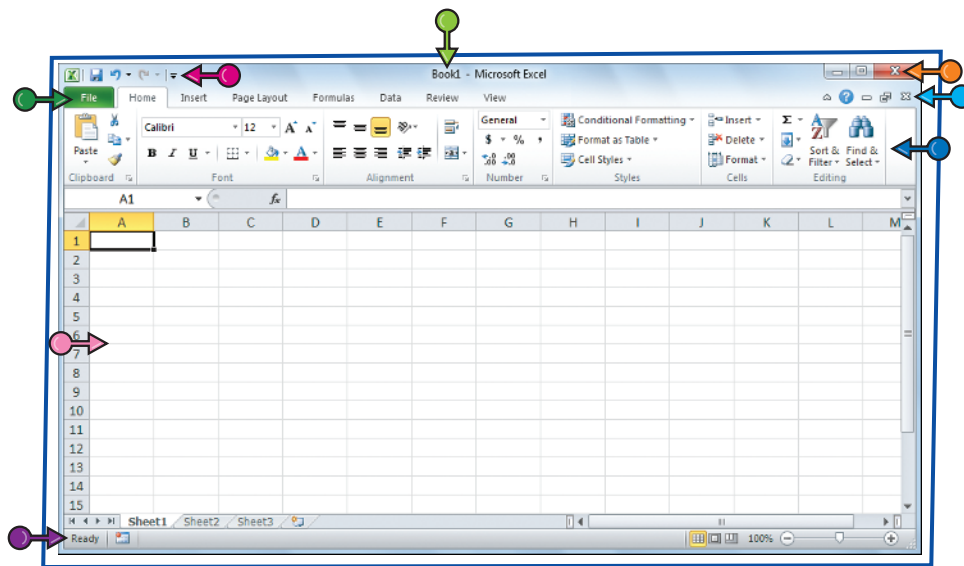
Title Bar

The title bar displays the name of the current workbook.

Quick Access Toolbar

This area gives you one-click access to a few often-used features. To learn how to customize this toolbar, see "Customize the Quick Access Toolbar."

Ribbon

This area gives you access to all of Excel's commands, options, and features. To learn how to use this element, see "Work with Excel's Ribbon."

Excel Window Controls

You use these controls to minimize, maximize, restore, and close Excel's application window.

Workbook Window Controls

You use these controls to minimize, maximize, restore, and close the current workbook window.

File Tab

Click this tab to access file-related commands, such as Save and Open.

Worksheet

This area displays the current worksheet, and it is where you will do most of your Excel work.

Status Bar

This area displays messages about Excel's current status, the results of certain operations, and other information.

Work with Excel's Ribbon

You use Excel's Ribbon element to access all of the program's features and commands. The *Ribbon* is the horizontal strip that runs across the top of the Excel window, just below the title bar. The Ribbon is organized into various tabs, such as File, Home, and Insert, and each tab contains related controls, which usually include buttons, lists, and check boxes. There is no menu bar in Excel, so you do not use pull-down menus to access commands.

Work with Excel's Ribbon
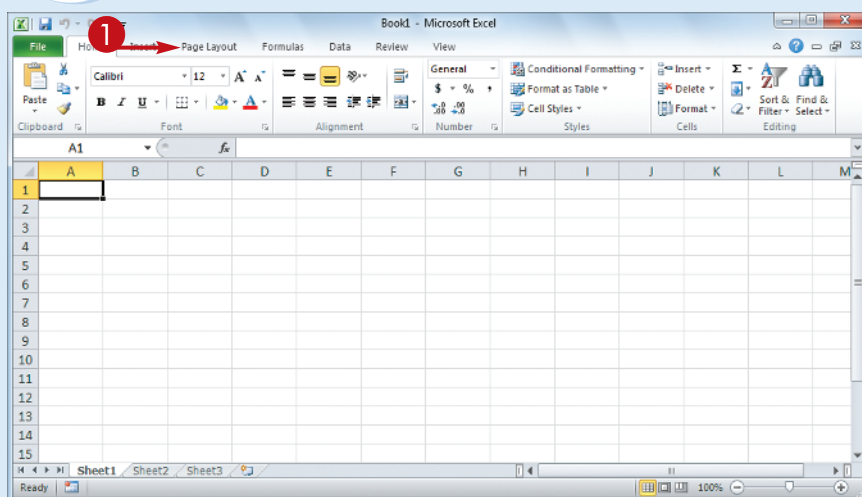
1 Click the tab that contains the Excel feature you want to work with.
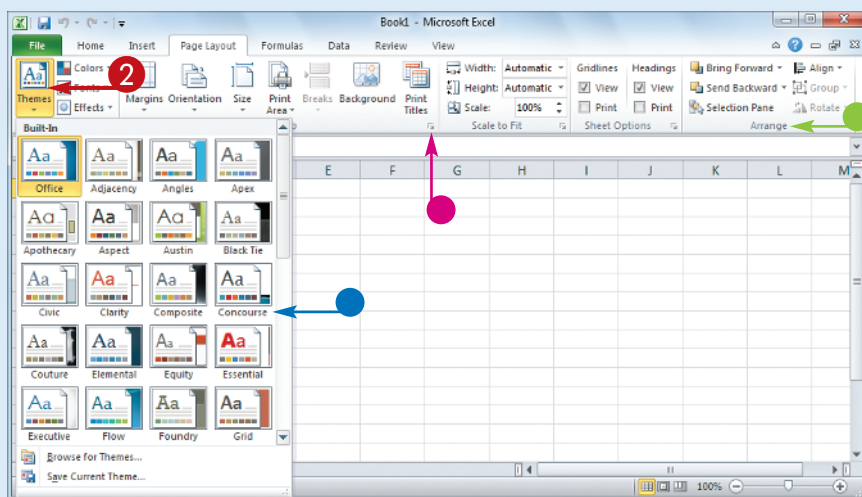
Excel displays the controls in the tab.

● Each tab is organized into groups of related controls, and the group names appear here.

● In many groups you can click the dialog box launcher button (⬚) to display a dialog box that contains group settings.

2 Click the control for the feature.

● If the control displays a list of options, click the option you want.

Excel runs the command or sets the option.

Work with Excel's Galleries

In Excel's Ribbon, a *gallery* is a collection of preset options that you can apply to the selected object in the worksheet. To get the most out of galleries, you need to know how they work.

Although some galleries are available all the time, in most cases you must select an object — such as a range of cells or a clip art image — before you work with a gallery.
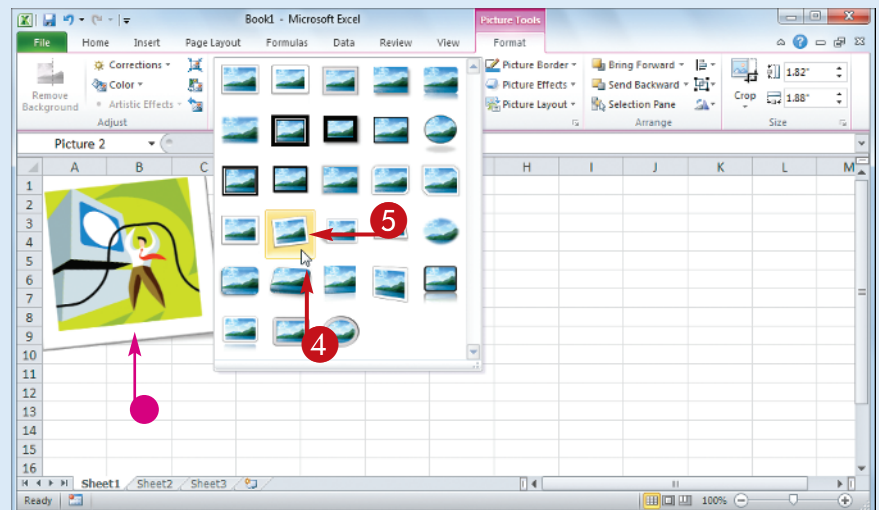
Work with Excel's Galleries

Work with a Gallery List

1 If necessary, click the object with which you want to apply an option from the gallery.

2 Click the tab that contains the gallery you want to use.

3 Click the gallery's **More** arrow (⬇).

● You can also scroll through the gallery by clicking the **Down** (⬇) and **Up** (⬆) arrows.

Excel displays a list of the gallery's contents.

4 Move the mouse 👆 over a gallery option to see a preview of the effect.

● Excel displays a preview of the effect.

5 Click the gallery option you want to use.

Excel applies the gallery options to the selected object.

Work with a Drop-Down Gallery
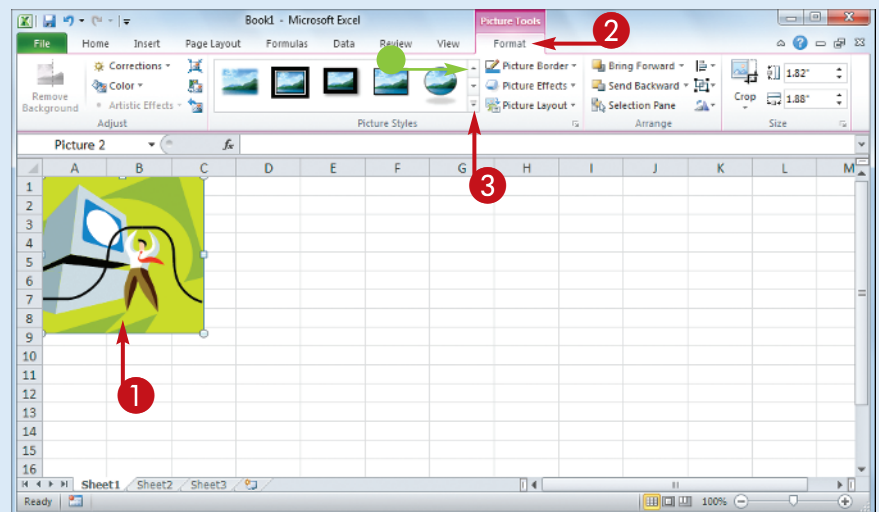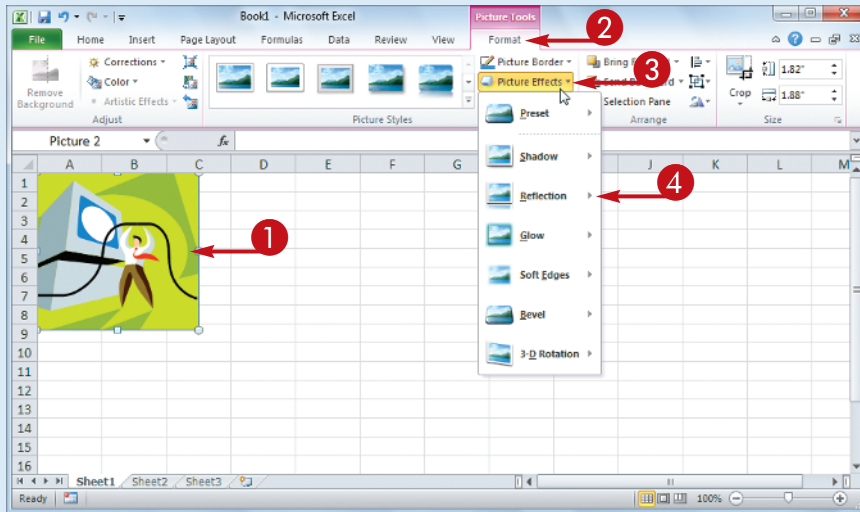
1 If necessary, click the object with which you want to apply an option from the gallery.

2 Click the tab that contains the gallery you want to use.

**3** Click the gallery's drop-down arrow (⊡).

Excel displays a list of the gallery's contents.

4 If the gallery contains one or more subgalleries, click the subgallery you want to use.

Excel displays the subgallery's contents.

● If a gallery has commands that you can run, those commands appear at the bottom of the gallery menu.

5 Move the mouse ⌖ over a gallery option to see a preview of the effect.

● Excel displays a preview of the effect.

6 Click the gallery option you want to use.

Excel applies the gallery option to the selected object.
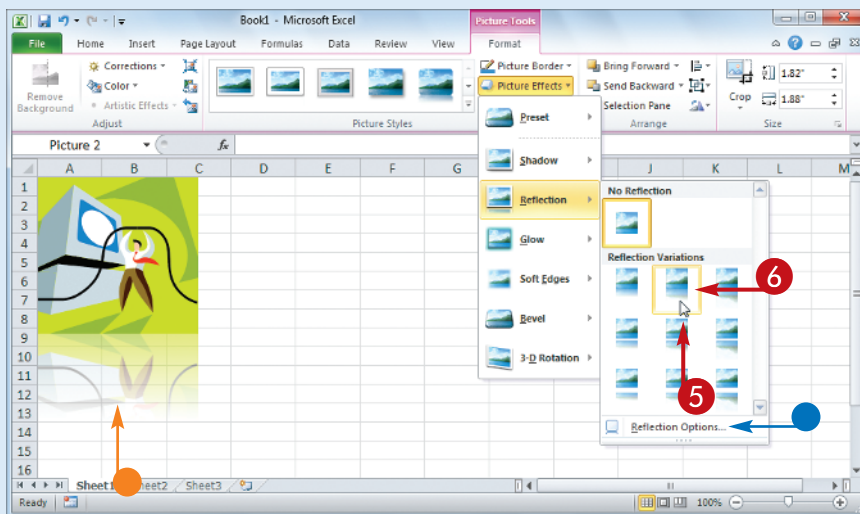
Simplify It

If I find the gallery preview feature distracting, can I turn it off?
Yes. The Live Preview feature is often handy because it shows you exactly what will happen when you click a gallery option. However, as you move the mouse through the gallery, the previews can be distracting. To turn off Live Preview, click the **File** tab, click **Options**, click the **General** tab, click **Enable Live Preview** (☑ changes to ☐), and then click **OK**.
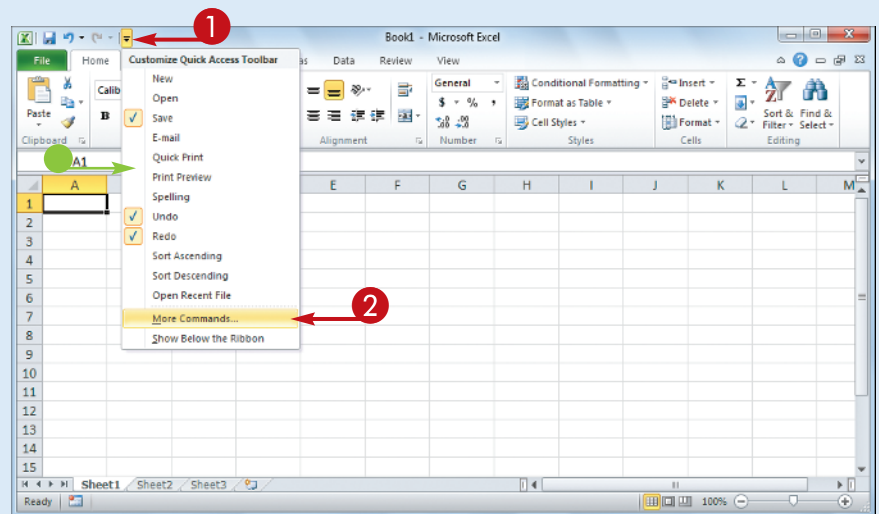
Customize the Quick Access Toolbar

You can make Excel easier to use by customizing the Quick Access Toolbar to include the Excel commands you use most often. You run Quick Access Toolbar buttons with a single click, so adding your favorite commands saves time. By default, the Quick Access Toolbar contains three buttons: Save, Undo, and Redo, but you can add any of Excel's hundreds of commands.

Since there is only so much room for the Quick Access Toolbar in Excel's menu bar, consider moving the Quick Access Toolbar below the Ribbon to gain more space for your custom commands.
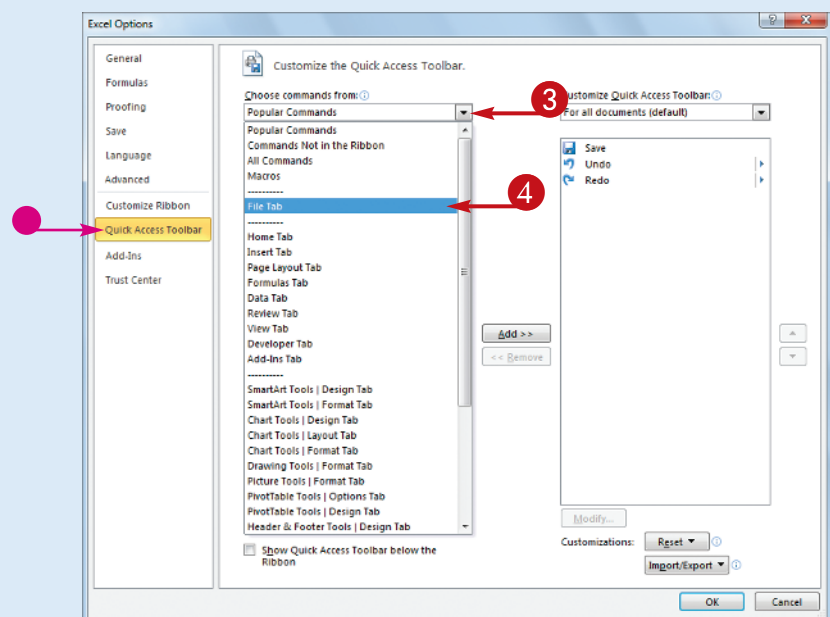
Customize the Quick Access Toolbar

① Click the **Customize Quick Access Toolbar** button (▾).

● If you see the command you want, click it and skip the rest of the steps in this section.

② Click **More Commands**.

The Excel Options dialog box appears.

● Excel automatically displays the Quick Access Toolbar tab.

③ Click the **Choose commands from** ▾.

④ Click the command category you want to use.
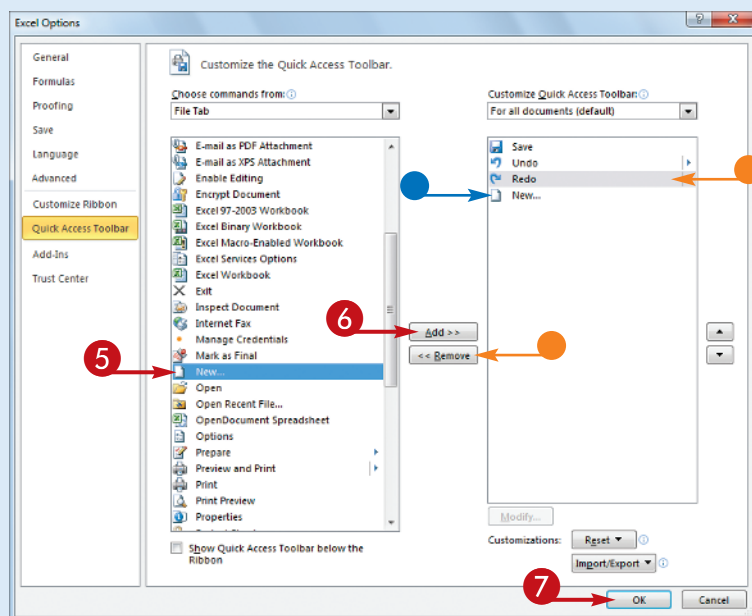
5 Click the command you want to add.

6 Click **Add**.

● Excel adds the command.

● To remove a command, click it and then click **Remove**.

7 Click **OK**.
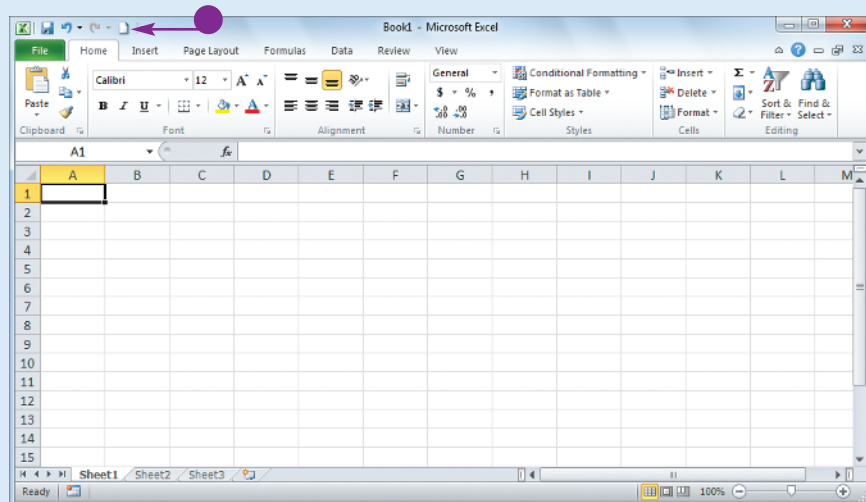
● Excel adds a button for the command to the Quick Access Toolbar.

Simplify It

Can I get more room on the Quick Access Toolbar to show more buttons?
Yes, you can increase the space available to the Quick Access Toolbar by moving it below the Ribbon. This gives the toolbar the full width of the Excel window, so you can add many more buttons. Click the **Customize Quick Access Toolbar** button (▾) and then click **Show Below the Ribbon**.

Is there a faster way to add buttons to the Quick Access Toolbar?
Yes. If the command you want to add appears on the Ribbon, you can add a button for the command directly from the Ribbon. Click the Ribbon tab that contains the command, right-click the command, and then click **Add to Quick Access Toolbar**. Excel inserts a button for the command on the Quick Access Toolbar.

Customize the Ribbon

You can improve your Excel productivity by customizing the Ribbon with extra commands that you use frequently. The default Ribbon contains eight tabs, and each of those tabs contains dozens of commands in the form of buttons, galleries, lists, and other controls. However, Excel has many other commands

available, and you may wish to add one or more of these other commands if you use any of them frequently.

To add a new command to the Ribbon, you must first create a new tab or a new group within an existing tab, and then add the command to the new tab or group.

Customize the Ribbon

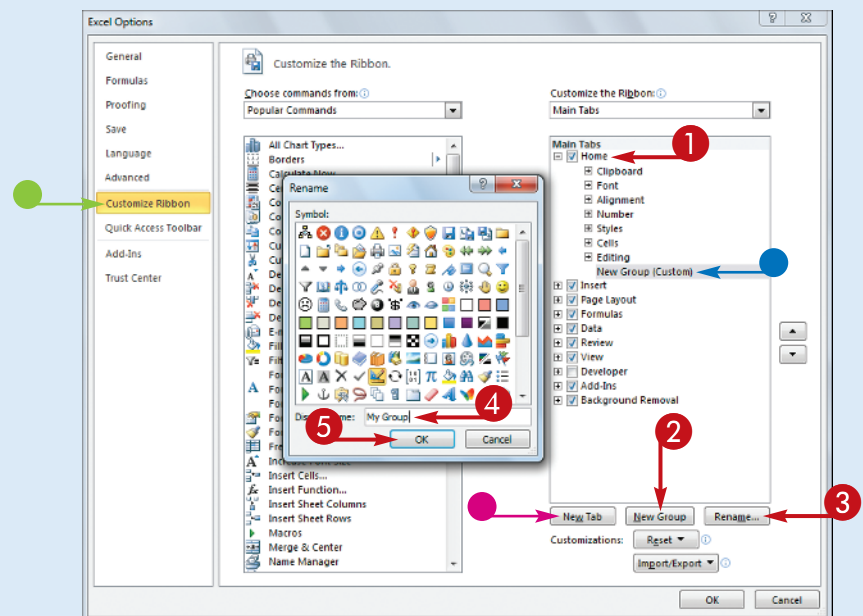### Display the Customize Ribbon Tab

1 Right-click any part of the Ribbon.

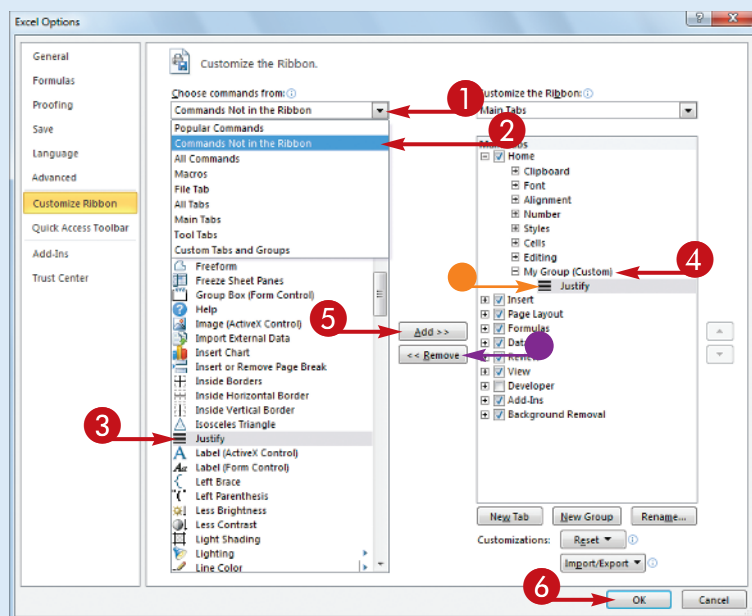**2** Click **Customize the Ribbon**.
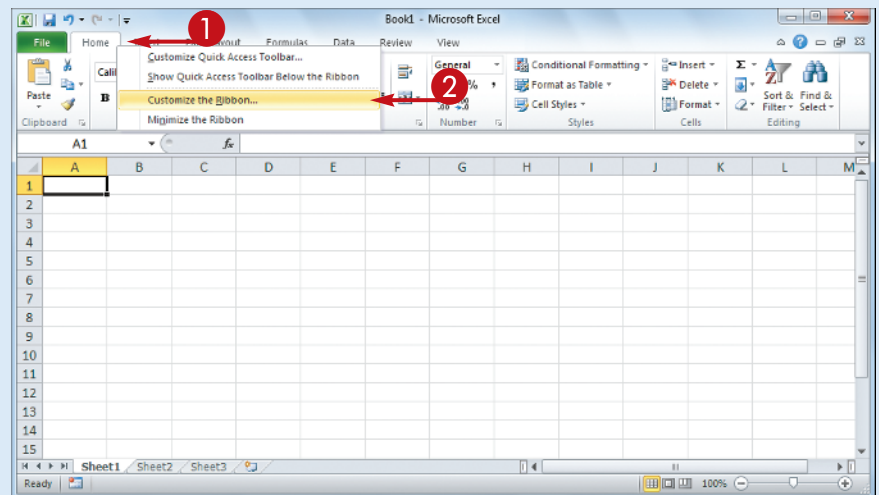
Add a New Tab or Group

The Excel Options dialog box appears.

● Excel automatically displays the Customize Ribbon tab.

1 Click the tab you want to customize.

● You can also click **New Tab** to create a custom tab.

2 Click **New Group**.

● Excel adds the group.

3 Click **Rename**.

**4** Type a name for the group.

5 Click **OK**.

Add a Command

1 Click the **Choose commands from** ▾.

2 Click the command category you want to use.

3 Click the command you want to add.

4 Click the custom group or tab you want to use.

5 Click **Add**.

● Excel adds the command.

● To remove a custom command, click it and then click **Remove**.

6 Click **OK**.

● Excel adds the new group and command to the Ribbon.

Simplify It
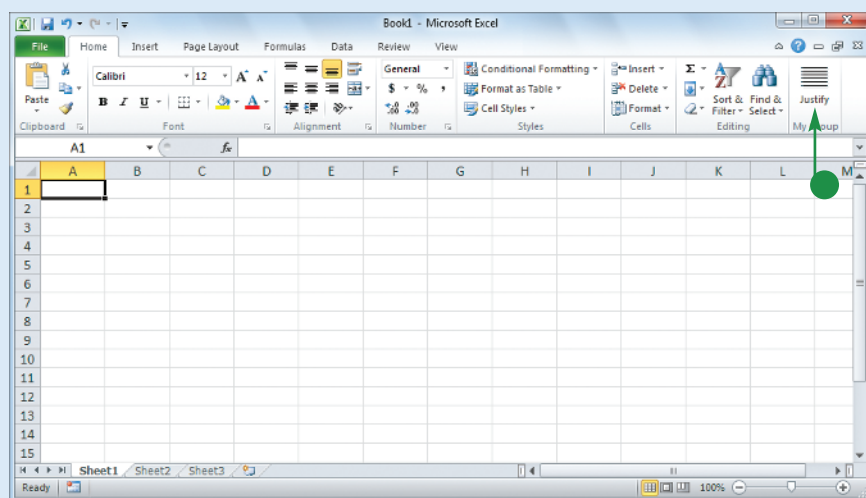
Can I customize the tabs that appear only when I select an Excel object?
Yes. Excel calls these *tool tabs*, and you can add custom groups and commands to any tool tab. Right-click any part of the Ribbon and then click **Customize the Ribbon** to display the Excel Options dialog box with the Customize Ribbon tab displayed. Click the **Customize the Ribbon** ▾ and then click **Tool Tabs**. Click the tab you want and then follow the steps in this section to customize it.

How do I restore the Ribbon to its default configuration?
Right-click any part of the Ribbon and then click **Customize the Ribbon** to display the Excel Options dialog box with the Customize Ribbon tab displayed. To restore a tab, click the tab, click **Restore Defaults**, and then click **Restore only selected Ribbon tab**. To remove all customizations, click **Restore Defaults** and then click **Restore all Ribbon tabs and Quick Access Toolbar customizations**.

15

Work with Smart Tags

You can make your Excel work faster and easier by taking advantage of smart tags. A *smart tag* is a special icon that appears when you perform certain Excel tasks, such as pasting data and using the AutoFill feature. Clicking the smart tag displays a list of options that enable you to control or modify the task you just performed. Some smart tags appear automatically in response to certain conditions. For example, if Excel detects an inconsistent formula, it displays a smart tag to let you know.
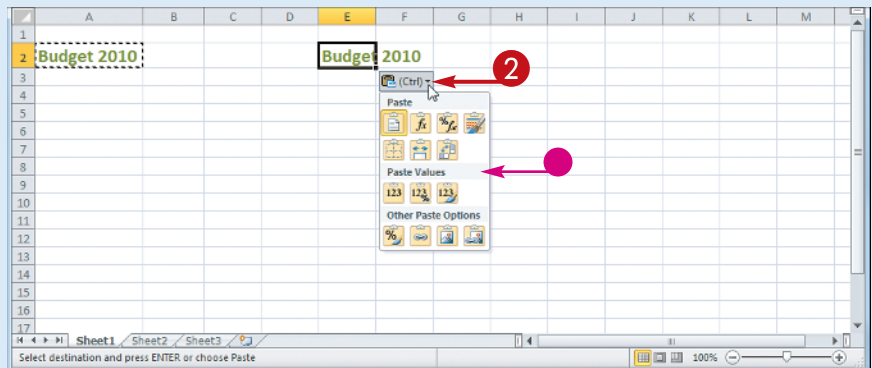
Work with Smart Tags

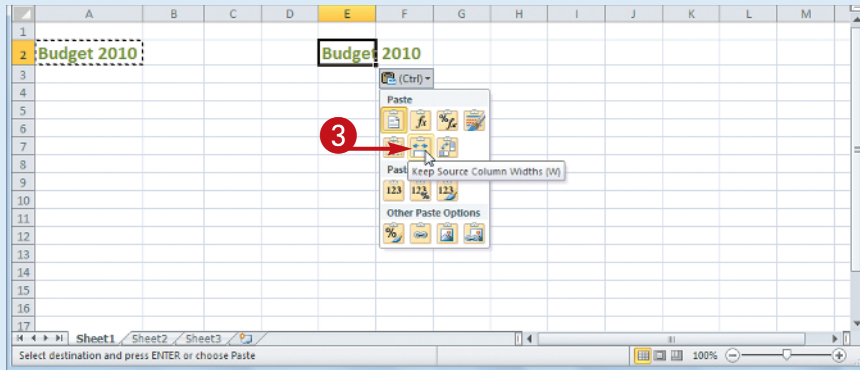① Perform an action that displays a smart tag, such as copying and pasting a cell as shown here.
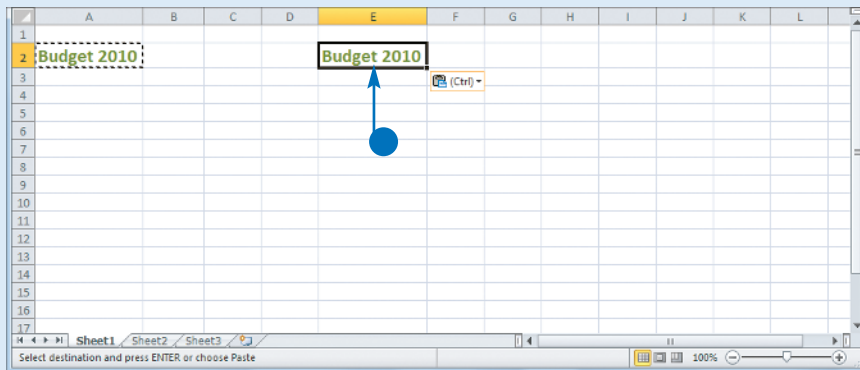
● The smart tag appears.
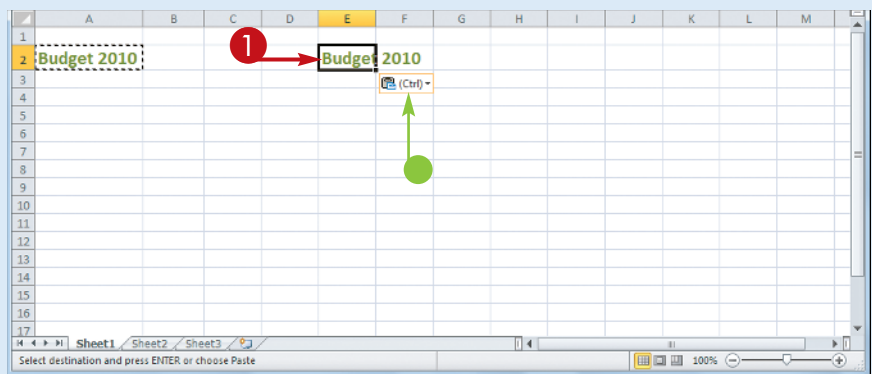
② Click the smart tag.

● The smart tag displays a list of its options.

3 Click the option you want to apply.

● Excel applies the option to the task you performed in Step **1**.

Simplify It

Are there other types of smart tags I can use?
Yes, Excel offers a few other smart tag types. For example, a Date smart tag recognizes a worksheet date and offers options such as scheduling a meeting on that date. To turn on these extra smart tags, click **File**, click **Options**, click **Proofing**, click **AutoCorrect Options**, and then click the **Smart Tags** tab. Click the **Label data with smart tags** check box (☐ changes to ☑), and then click the check box beside each smart tag in the **Recognizers** list (☐ changes to ☑). Click **OK**.
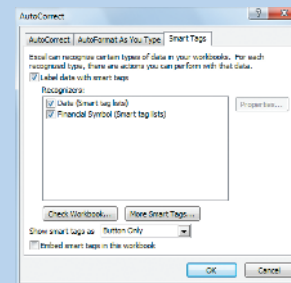
Change the View

You can adjust the Excel window to suit what you are currently working on by changing the view to match your current task. Excel offers three different views: Page Layout, which displays worksheets as they would appear if you printed them out; Page Break Preview, which displays the page breaks as blue lines, as described in the first Tip on the next page; and Normal, which is useful for building and editing worksheets.
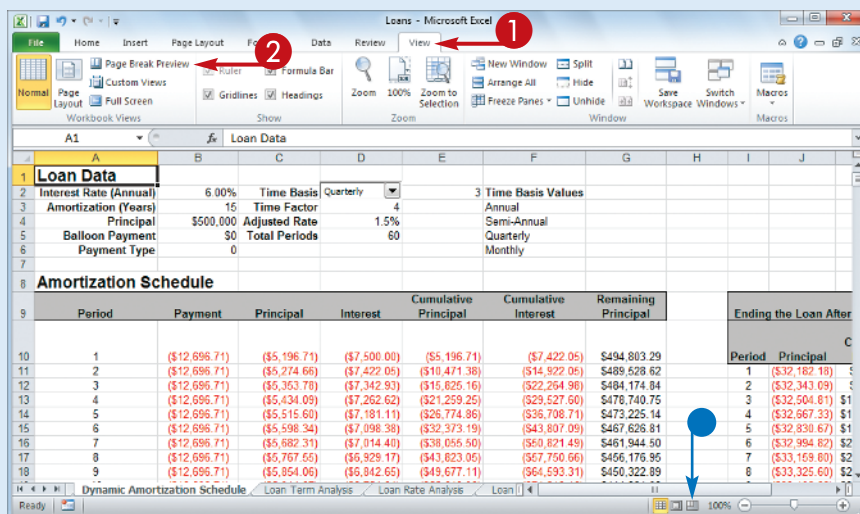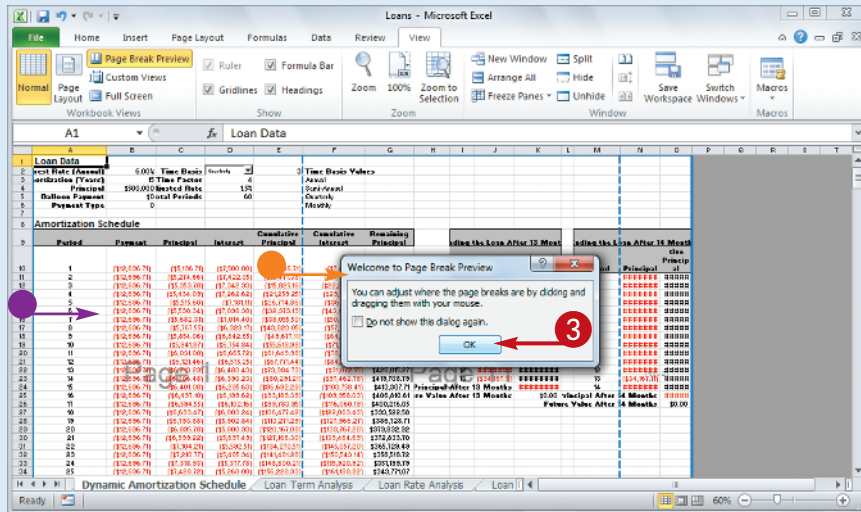
Change the View

Switch to Page Layout View

1 Click the **View** tab.

2 Click **Page Layout**.

● You can also click the **Page Layout** button ( ).

● Excel switches to Page Layout view.
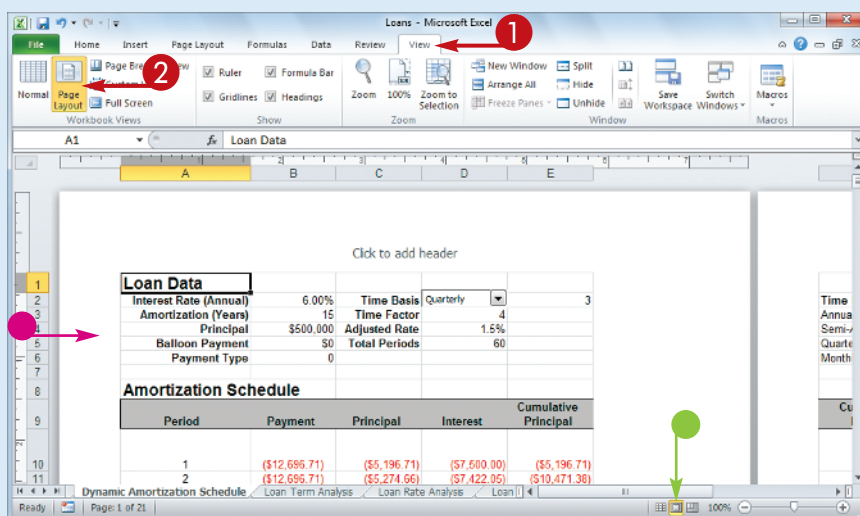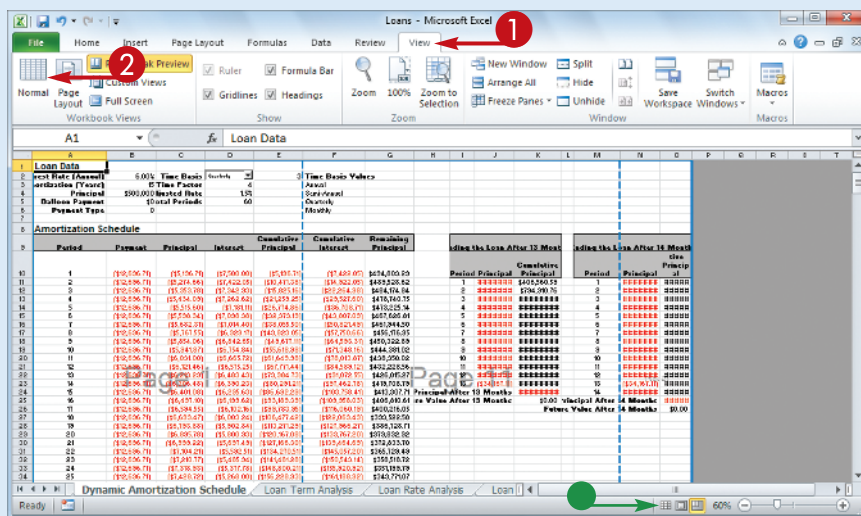

Switch to Page Break Preview

1 Click the **View** tab.

2 Click **Page Break Preview**.

● You can also click the **Page Break Preview** button ( ).

● The Welcome to Page Break Preview dialog box appears.

● Excel switches to Page Break Preview.

3 Click **OK**.

Switch to Normal View

1 Click the **View** tab.

2 Click **Normal**.

● You can also click the **Normal** button (▦).

Excel switches to Normal view.

What does Page Break Preview do?
In Excel, a *page break* is a position within a worksheet where a new page begins when you print the worksheet. When you switch to Page Break Preview, Excel displays the page breaks as blue lines. If a page break occurs in a bad position — for example, the page break includes the headings from a range, but not the cells below the headings — you can use your mouse ⤡ to click and drag the page breaks to new positions.

What does Full Screen view do?
Full Screen view is useful when you want to see the maximum amount of a worksheet on the screen. Full Screen view removes many of the Excel window features, including the File button, Ribbon, Quick Access Toolbar, Formula bar, and status bar. To return to the Normal view, press `Esc`, or click the **Restore Down** button (🗗).
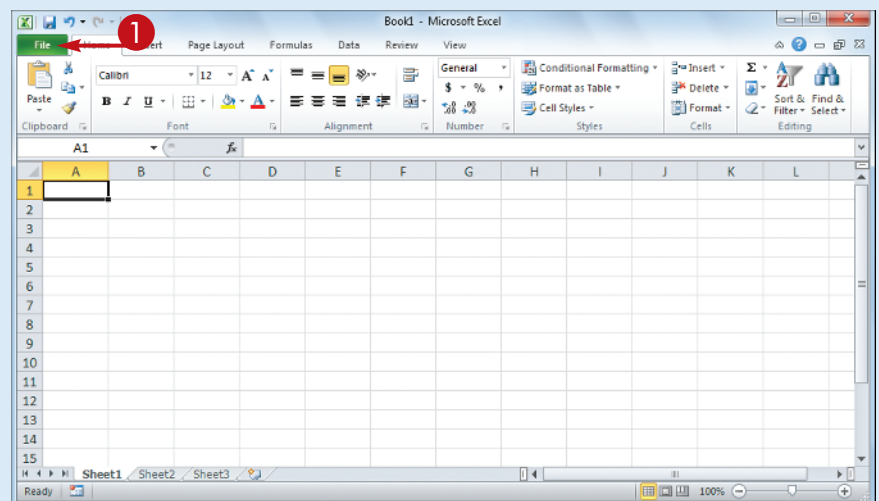
Configure Excel Options

You can customize Excel and set up the program to suit the way you work by configuring the Excel options. You use these options to set your Excel preferences in a number of program categories, including formulas, proofing, and saving.
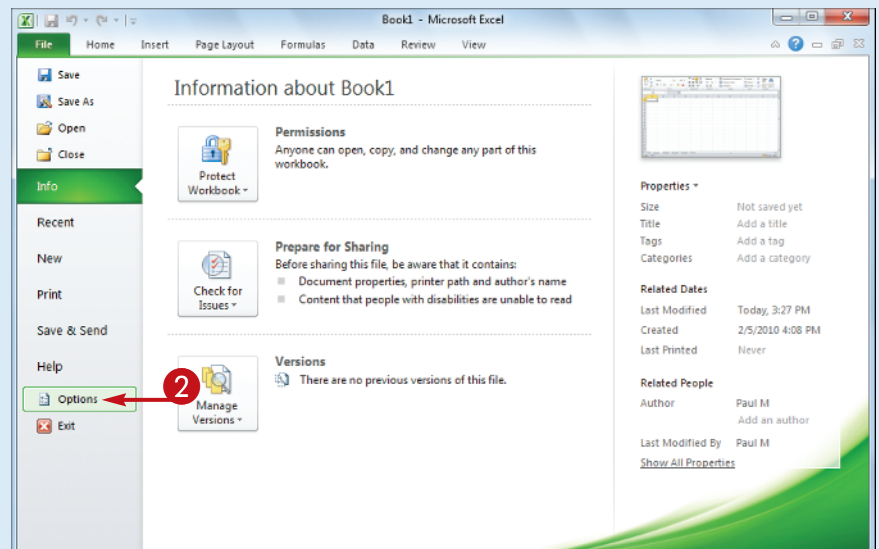
To use these options, you must know how to display the Excel Options dialog box. These options are dialog box controls such as check boxes, option buttons, and lists that enable you to configure many aspects of Excel.
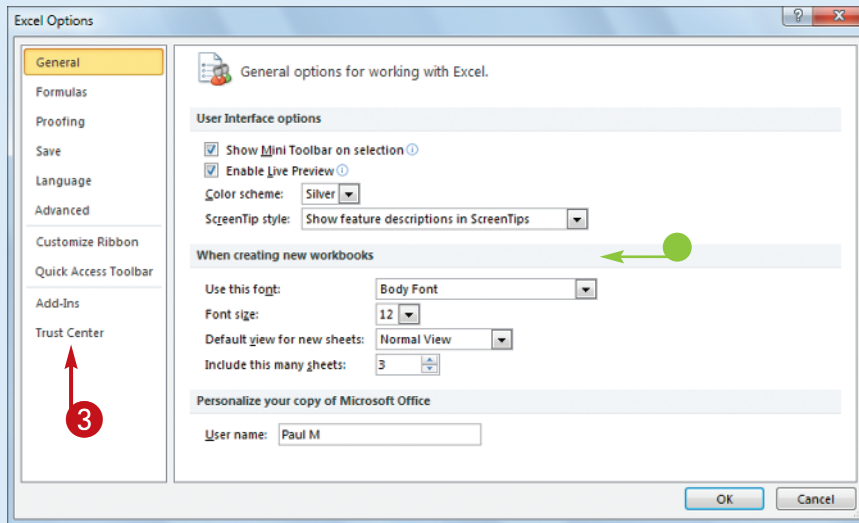
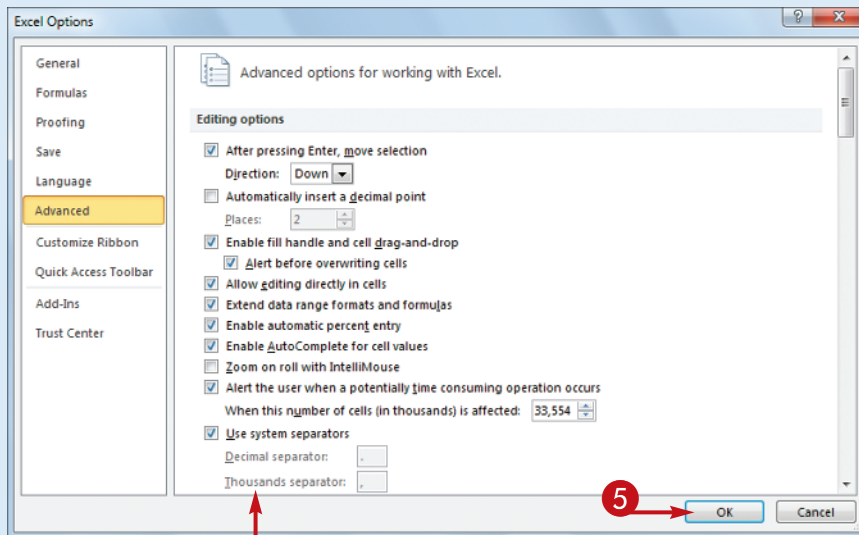## Configure Excel Options

1 Click the **File** tab.

2 Click **Options**.

The Excel Options dialog box appears.

③ Click a tab on the left side of the dialog box to choose the configuration category you want to work with.

● The controls that appear on the right side of the dialog box change according to the tab you select.

④ Use the controls on the right side of the dialog box to configure the options you want to change.

⑤ Click **OK**.

Excel puts the new options into effect.

Are there faster methods I can use to open the Excel Options dialog box?
Yes. Some features of the Excel interface offer shortcut methods that get you to the Excel Options dialog box faster. For example, right-click the Ribbon and then click **Customize Ribbon** to open the Excel Options dialog box with the Customize Ribbon tab displayed. From the keyboard, you can open the Excel Options dialog box by pressing **Alt** + **F** and then pressing **I**.

How do I know what each option does?
Excel offers pop-up descriptions of some — but, unfortunately, not all — of the options. If you see a small *i* with a circle around it to the right of the option name, it means pop-up help is available for that option. Hover the mouse over the option and Excel displays a pop-up description of the option after a second or two.