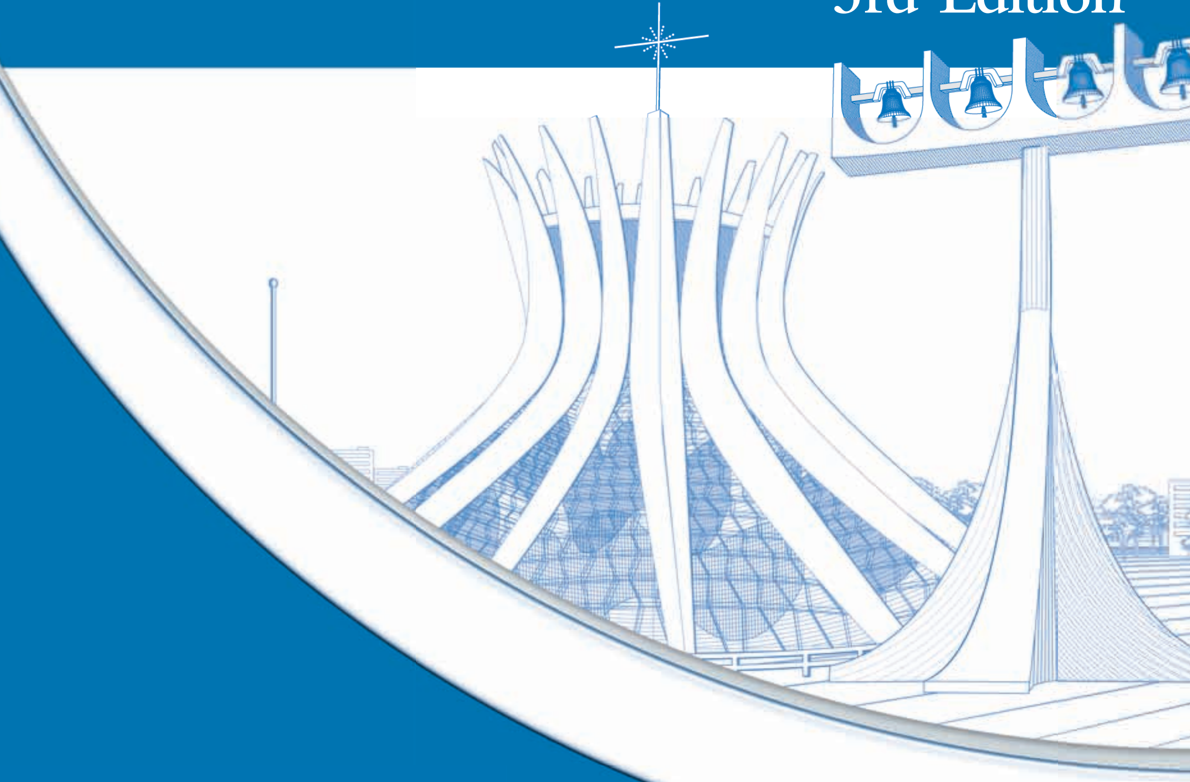
Visual® Read Less-Learn More®

Denise Etheridge

Microsoft® Excel® Data Analysis

3rd Edition

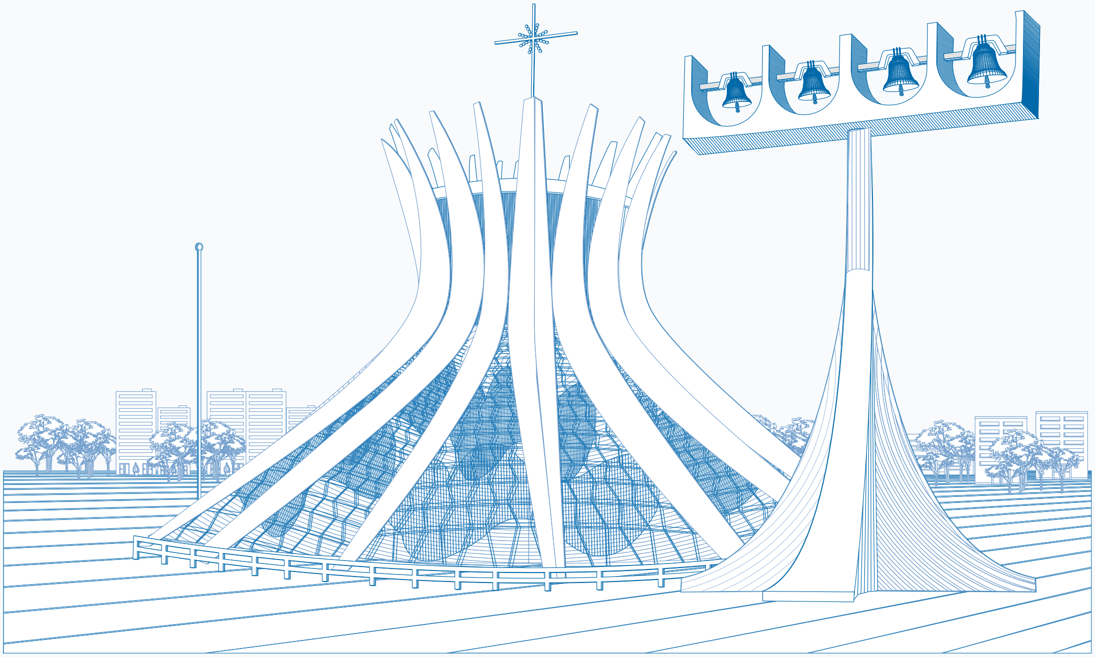


Companion Web site includes example files to illustrate the instructions

Your visual blueprint™ for creating and analyzing data, charts, and PivotTables

Excel® Data Analysis

Your visual blueprint™ for creating and analyzing data, charts, and PivotTables, 3rd Edition



by Denise Etheridge

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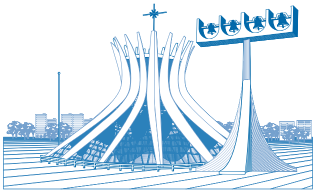
The Metropolitan Cathedral of Brasilia

A vision of architect Oscar Niemeyer, the breathtaking Metropolitan Cathedral of Brasilia reflects the innovative architecture and design that characterize this young and original city. Sweeping skyward, the Cathedral's sixteen gracefully curved columns symbolize hands lifted in prayer, while the unique bell tower replicates a candelabra. Begun in 1959, the Cathedral was designated a Historic Monument in 1967, thereby accessing public funds for its completion. It was dedicated in 1970.

Learn more about Brasilia's unusual history and architecture in *Frommer's Brazil, 5th Edition* (ISBN 978-0-470-59151-2), available wherever books are sold or at www.Frommers.com.



Disclaimer

In order to get this information to you in a timely manner, this book was based on a pre-release version of Microsoft Office 2010. There may be some minor changes between the screenshots in this book and what you see on your desktop. As always, Microsoft has the final word on how programs look and function; if you have any questions or see any discrepancies, consult the online help for further information about the software.

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Dedication

This book is dedicated to my brother, Erskine Etheridge.

How to Use This Visual Blueprint Book

Who This Book Is For

This book is for advanced computer users who want to take their knowledge of this particular technology or software application to the next level.

The Conventions in This Book

① Steps

This book uses a step-by-step format to guide you easily through each task. Numbered steps are actions you must do; bulleted steps clarify a point, step, or optional feature; and indented steps give you the result.

② Notes

Notes give additional information — special conditions that may occur during an operation, a situation that you want to avoid, or a cross reference to a related area of the book.

③ Icons and Buttons

Icons and buttons show you exactly what you need to click to perform a step.

④ Extra or Apply It

An Extra section provides additional information about the preceding task — insider information and tips for ease and efficiency. An Apply It section takes the code from the preceding task one step further and allows you to take full advantage of it.

⑤ Bold

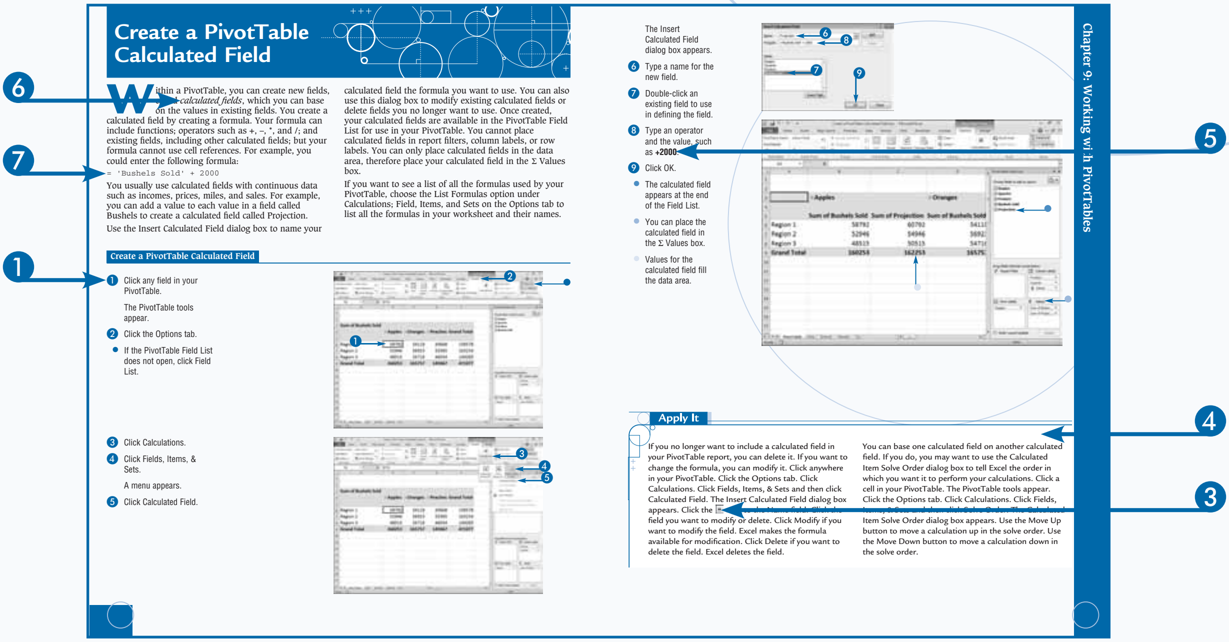
Bold type shows text or numbers you must type.

⑥ Italics

Italic type introduces and defines a new term.

⑦ Courier Font

`Courier font` indicates the use of scripting language code such as statements, operators, or functions, and code such as objects, methods, or properties.



Create a PivotTable Calculated Field

Within a PivotTable, you can create new fields, called *calculated fields*, which you can base on the values in existing fields. You create a calculated field by creating a formula. Your formula can include functions; operators such as +, –, *, and /; and existing fields, including other calculated fields; but your formula cannot use cell references. For example, you could enter the following formula:

`= 'Bushels Sold' + 2000`

You usually use calculated fields with continuous data such as incomes, prices, miles, and sales. For example, you can add a value to each value in a field called Bushels to create a calculated field called Projection.

Use the Insert Calculated Field dialog box to name your calculated field the formula you want to use. You can also use this dialog box to modify existing calculated fields or delete fields you no longer want to use. Once created, your calculated fields are available in the PivotTable Field List for use in your PivotTable. You cannot place calculated fields in report filters, column labels, or row labels. You can only place calculated fields in the data area, therefore place your calculated field in the Σ Values box.

If you want to see a list of all the formulas used by your PivotTable, choose the List Formulas option under Calculations; Field, Items, and Sets on the Options tab to list all the formulas in your worksheet and their names.

Create a PivotTable Calculated Field

① Click any field in your PivotTable.

The PivotTable tools appear.

② Click the Options tab.

- If the PivotTable Field List does not open, click Field List.

③ Click Calculations.

④ Click Fields, Items, & Sets.

A menu appears.

⑤ Click Calculated Field.

The Insert Calculated Field dialog box appears.

⑥ Type a name for the new field.

⑦ Double-click an existing field to use in defining the field.

⑧ Type an operator and the value, such as **+2000**.

⑨ Click OK.

- The calculated field appears at the end of the Field List.
- You can place the calculated field in the Σ Values box.
- Values for the calculated field fill the data area.

Apply It

If you no longer want to include a calculated field in your PivotTable report, you can delete it. If you want to change the formula, you can modify it. Click anywhere in your PivotTable. Click the Options tab. Click Calculations. Click Fields, Items, & Sets and then click Calculated Field. The Insert Calculated Field dialog box appears. Click the ▤ next to the Name field. Click the field you want to modify or delete. Click Modify if you want to modify the field. Excel makes the formula available for modification. Click Delete if you want to delete the field. Excel deletes the field.

You can base one calculated field on another calculated field. If you do, you may want to use the Calculated Item Solve Order dialog box to tell Excel the order in which you want it to perform your calculations. Click a cell in your PivotTable. The PivotTable tools appear. Click the Options tab. Click Calculations. Click Fields, Items, & Sets and then click Solve Order. The Calculated Item Solve Order dialog box appears. Use the Move Up button to move a calculation up in the solve order. Use the Move Down button to move a calculation down in the solve order.

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Introducing Data Analysis with Excel

This book is about using Microsoft Excel to analyze your data. Microsoft Excel is an electronic worksheet you can use to perform mathematical, financial, and statistical calculations; create charts; analyze your data with a PivotTable; maintain lists; and much more. Excel can help you locate data, find trends in your data, and present your data to others.

Each Excel file is a workbook. Each workbook can have multiple worksheets. Worksheets are made up of rows and columns of cells you can use to enter information.

The most powerful feature in Excel is its ability to calculate. When you enter a formula into Excel, Excel can automatically calculate the result, and when you make changes to your worksheet, Excel can automatically recalculate.

You can also use Excel to create charts. A chart is a graphical representation of your data. When using Excel, you can choose from several types of charts, including Column, Line, Pie, Bar, Area, and Scatter. Charts can make your data easier to read, easier to understand, and easier to compare.

A *PivotTable* is an interactive table you can use to analyze data. A PivotTable gives you an easy way to summarize and view large amounts of data. Using a PivotTable, you can rotate rows and columns of data so you can see different views of your data easily. You can use Excel to create PivotTables.

Excel provides a way for you to create and maintain lists. A list is a series of rows and columns. Each column has a label — for example, name, address, telephone number. Each row under a column has information pertaining to the column label. You can sort, filter, and analyze your lists in Excel.

Introducing Data Analysis with Excel

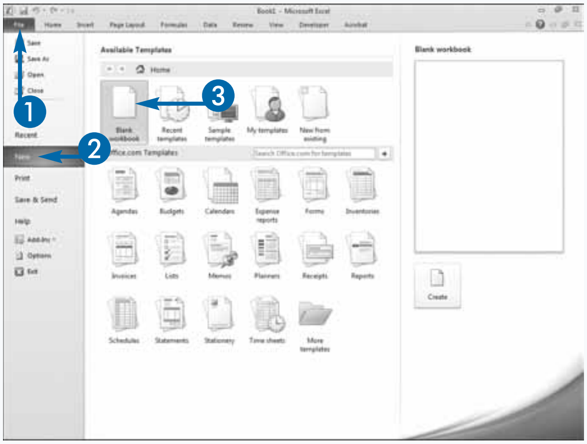
Open a New Workbook

① Click the File tab.

A menu appears.

② Click New.

③ Double-click Blank workbook.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Save As
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Available Templates
Home
Blank workbook
Recent templates
Sample templates
My templates
New from existing
Office.com Templates
Search Office.com for templates
Agendas
Budgets
Calendars
Expense reports
Forms
Inventories
Invoices
Lists
Memos
Planners
Receipts
Reports
Schedules
Statements
Stationery
Time sheets
More templates
Blank workbook
Create
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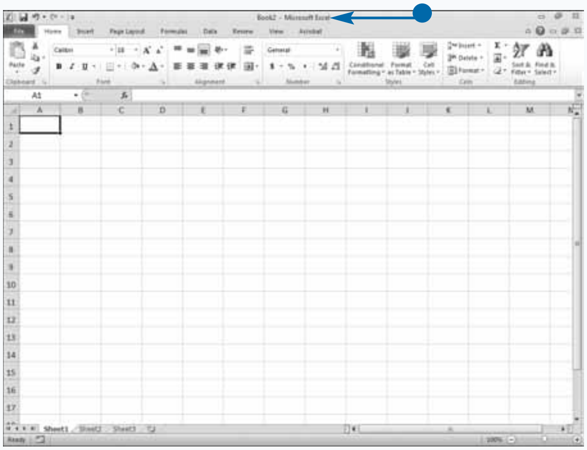
- Excel opens a new workbook.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11
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Conditional Formatting
Format as Table
Cell Styles
Insert
Delete
Format
Sort & Filter
Find & Select
Clipboard
Font
Alignment
Number
Styles
Cells
Editing
A1
Sheet1
Sheet2
Sheet3
Ready
100%

Tour the Excel Window

When you open an Excel workbook, Excel presents the Excel window. You use the window to create Excel documents. Your window should be similar to the one in the illustration. It may not be exactly the same because Excel renders windows based on the size of your screen, the resolution to which your screen is set, and the other screen display options.

View of the Excel Window

Ⓐ FILE TAB

Click the File tab to open, save, print, prepare, send, publish, and close files.

Ⓑ QUICK ACCESS TOOLBAR

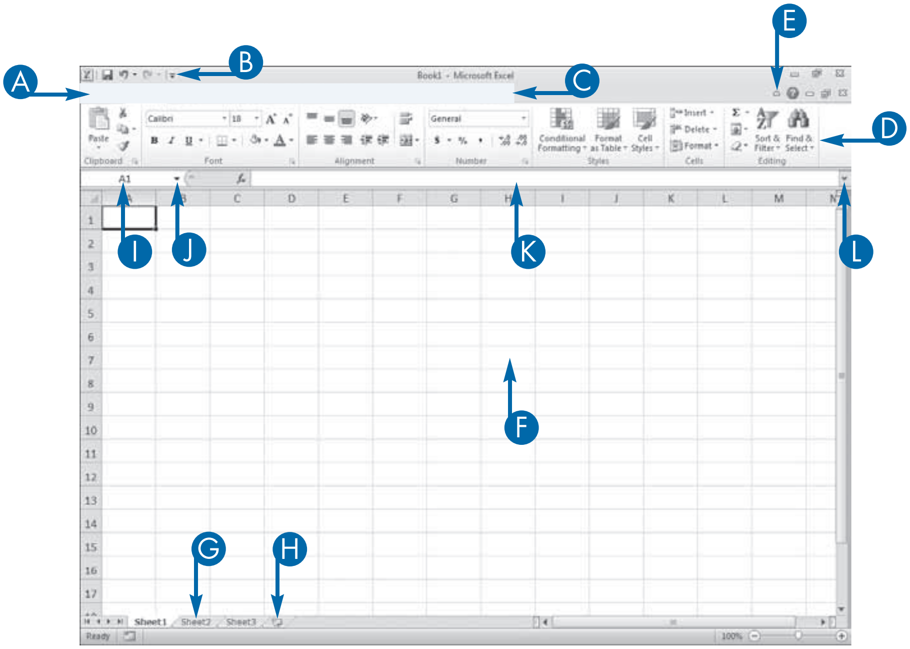
Place commands you use often on the Quick Access Toolbar.

Ⓒ TABS

Click a tab to view Ribbon options.

Ⓓ RIBBON

Click the buttons in the Ribbon to execute Excel commands.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Format as Table
Cell Styles
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Sheet1
Sheet2
Sheet3
Ready
100%

Ⓔ Minimize the Ribbon

Click the chevron to Hide the Ribbon so that only tabs show.

Ⓕ CELL

Enter data into cells.

Ⓖ SHEETS

Enter data into each sheet of a workbook.

Ⓗ INSERT SHEET

Click this button to insert a new sheet.

Ⓘ NAME BOX

Displays the name of the active cell.

Ⓙ DROP-DOWN LIST

Displays a list of defined range names.

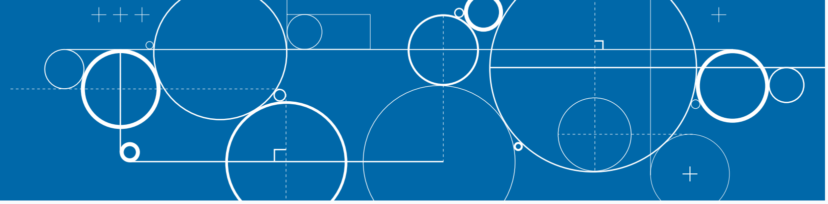
Ⓚ FORMULA BAR

Use the formula bar to enter and edit data.

Ⓛ EXPAND FORMULA BAR

Click the chevron to make the formula bar larger.

Explore the Ribbon

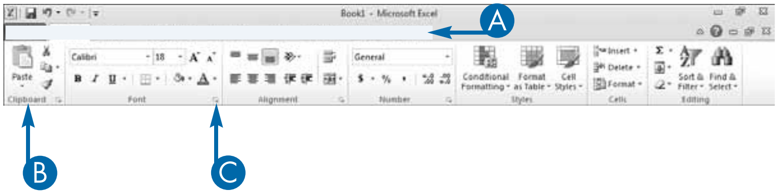


You use commands to tell a program what you want it to do. In Excel, you use the Ribbon to issue commands. The Ribbon consists of several tabs. Tabs group related commands together. The most frequently used commands are on the Home tab, the commands you use to insert objects into a worksheet are on the Insert tab, the commands you use to layout your document are on the Page Layout tab and so on.

Within a tab, related commands are organized into groups. For example, on the Home tab, commands relating to cutting, copying, and pasting are in the Clipboard group. Commands, related changing the size, color, or style of a font, are in the Font group. Some groups have a launcher. When you click the launcher, a menu or dialog box appears. You can use the menu or dialog box to access additional commands.

Ribbon Commands

The Ribbon contains commands organized in three components: tabs, groups, and commands. Tabs appear across the top of the Ribbon and contain groups of related commands. Groups organize related commands with each group name appearing below the group on the Ribbon. Note some groups have a Dialog Box Launcher button in the lower-right corner. Commands appear within each group.



Ⓐ Tabs

Tabs appear across the top of the Ribbon and contain groups of related commands. The File tab provides access to the Backstage view in all Office programs. In Backstage view, you can open, save, and print worksheets.

Ⓑ Groups

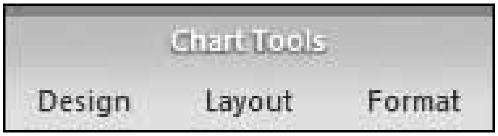
Commands are arranged into groups with the group names shown at the bottom of the tab.

Ⓒ Dialog Box Launcher

This button appears in the lower-right corner of many groups on the Ribbon. Clicking this button opens a dialog box, menu or task pane that provides more options.

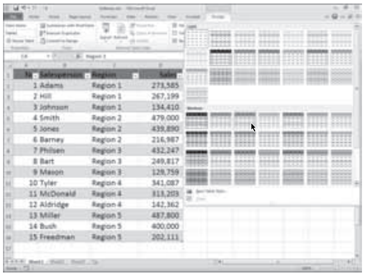
Contextual Tabs

Some tabs only appear when needed. These tabs are called contextual tabs. For example, the tabs that you use to edit a chart only appear when you are modifying a chart.



Galleries

Galleries provide you with a list of choices. As you hover over each gallery choice, Excel provides you with a live preview of how your document will appear if you choose that option. For example, in Excel you can apply a style to a table. When you hover over a style in the Table Styles gallery, Excel provides you with a live preview of how the style will appear if you choose it.



Nu	Salesperson	Region	Sale
1	Adams	Region 1	273,585
2	Hill	Region 1	267,199
3	Johnson	Region 1	134,410
4	Smith	Region 2	479,000
5	Jones	Region 2	439,890
6	Barney	Region 2	216,987
7	Philsen	Region 3	432,247
8	Bart	Region 3	249,817
9	Mason	Region 3	129,759
10	Tyler	Region 4	341,087
11	McDonald	Region 4	313,203
12	Aldridge	Region 4	142,362
13	Miller	Region 5	487,800
14	Bush	Region 5	400,000
15	Freedman	Region 5	202,111

Using the Mini Toolbar and Context Menu

Excel makes some commands readily available via the Mini toolbar and the context menu. When you right-click in Excel, the Mini toolbar and a context menu appear. Most often, the Mini toolbar appears first and the context menu appears under it. What appears on the Mini toolbar and context menu depends upon what you are working on at the time you right-click. For example, if you right-click while you have a range of cells selected, options related to modifying cells appear. If you right-click while you are modifying a chart, options related to modifying a chart appear. In general, you can use the Mini toolbar to perform popular formatting commands. You can use the context menu to perform popular commands related to the object on which you are working.

Apply It

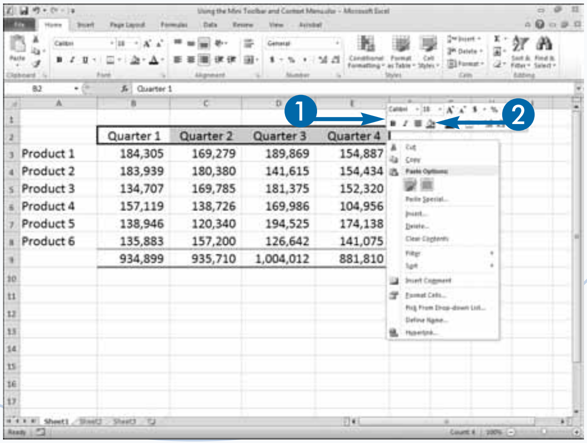
When you select within a cell or other object, the Mini toolbar appears automatically. To prevent it from appearing, click the File tab and then click Options. The Excel Options dialog box appears. Click General. The General Options for Working with Excel pane appears. Deselect Show Mini Toolbar on Selection (☑ changes to ☐). Click OK. You cannot easily prevent the Mini toolbar from appearing when you right-click.

Using the Mini Toolbar and Context Menu

① Right-click.

The Mini toolbar and context menu appear.

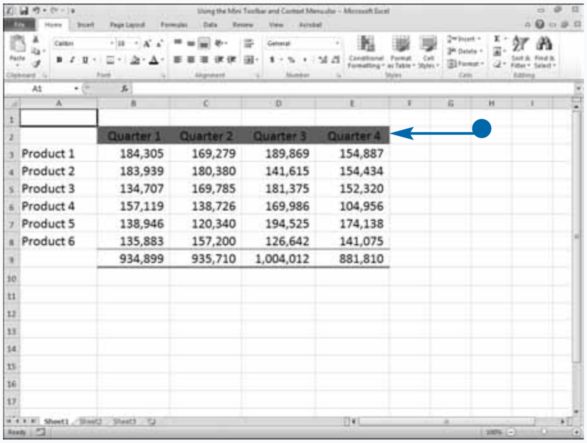
② Click a button or menu option to select a command.



	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Product 1	184,305	169,279	189,869	154,887
Product 2	183,939	180,380	141,615	154,434
Product 3	134,707	169,785	181,375	152,320
Product 4	157,119	138,726	169,986	104,956
Product 5	138,946	120,340	194,525	174,138
Product 6	135,883	157,200	126,642	141,075
	934,899	935,710	1,004,012	881,810

Excel executes the command.

- In this example, Excel applies a fill.



	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Product 1	184,305	169,279	189,869	154,887
Product 2	183,939	180,380	141,615	154,434
Product 3	134,707	169,785	181,375	152,320
Product 4	157,119	138,726	169,986	104,956
Product 5	138,946	120,340	194,525	174,138
Product 6	135,883	157,200	126,642	141,075
	934,899	935,710	1,004,012	881,810

Select Options on the Status Bar

The status bar appears at the bottom of the Excel window. It displays the status of several options. For example, the Zoom button appears on the status bar. It displays the current zoom level. You can click the Zoom button to open the Zoom dialog box and manually set the zoom level. The Zoom slider also appears in the status bar. You can drag it to the right to zoom in, thereby making the contents of your worksheet larger, or drag it to the left to zoom out, thereby making the contents of your worksheet smaller. When you right-click the status bar, you can select which options appear on it. Several options, such as the Zoom slider, Zoom button, and Macro Recorder, appear by default.

Extra

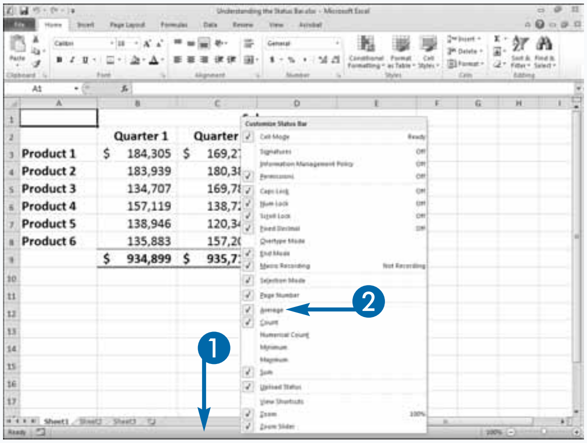
You can automate the tasks you perform in Excel by recording a macro. By default, the Macro Recorder button (▣) appears on the status bar. Click the Macro Recorder button to begin recording a macro. The Record Macro dialog box appears. Fill in the fields and then perform the steps you want to automate. When you are finished performing the steps, click the Macro Recorder button again. See Chapter 14 for detailed information.

Select Options on the Status Bar

① Right-click the status bar.

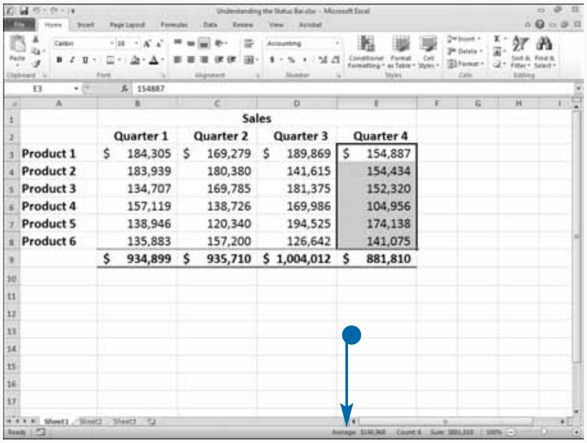
A list of options appears. Selected options have a check mark. Deselected options do not have a check mark.

② Click options to select or deselect them (☐ changes to ☑ or ☑ changes ☐).


Customize Status Bar
Cell Mode
Ready
Signatures
Off
Information Management Policy
Off
Permissions
Off
Caps Lock
Off
Num Lock
Off
Scroll Lock
Off
Fixed Decimal
Off
Overtype Mode
End Mode
Macro Recording
Not Recording
Selection Mode
Page Number
Average
Count
Numerical Count
Minimum
Maximum
Sum
Upload Status
View Shortcuts
Zoom
100%
Zoom Slider
1
2

- Selected options appear on the status bar.

Some options only appear when appropriate.



E3 154887

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
		Sales		
Product 1	$ 184,305	$ 169,279	$ 189,869	$ 154,887
Product 2	183,939	180,380	141,615	154,434
Product 3	134,707	169,785	181,375	152,320
Product 4	157,119	138,726	169,986	104,956
Product 5	138,946	120,340	194,525	174,138
Product 6	135,883	157,200	126,642	141,075
	$ 934,899	$ 935,710	$ 1,004,012	$ 881,810

Take a Look at Backstage View

The File tab is located in the upper-left corner of the Excel window. When you click the tab, you are moved to an area Microsoft calls Backstage view. You can use this area to do such things as open a file, save a file, print a file, review a file, or set Excel options. In short, to create and edit your document you use the Ribbon; to work with your document you use Backstage view. The commands you need to open a new or existing document, to set document properties, or to share a file by printing, e-mailing, or faxing are all located in Backstage view.

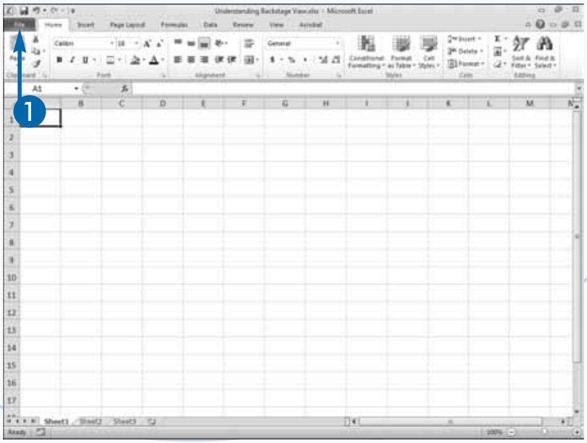
Apply It

To save an Excel document, click the Save button (💾) on the Quick Access Toolbar or click the File tab, and then click Save. You can also click Save As to save a document under another name.

To open a document, click the File tab and then click Open. The Open dialog box appears. Locate and click the document you want to open and then click the Open button.

Take a Look at Backstage View

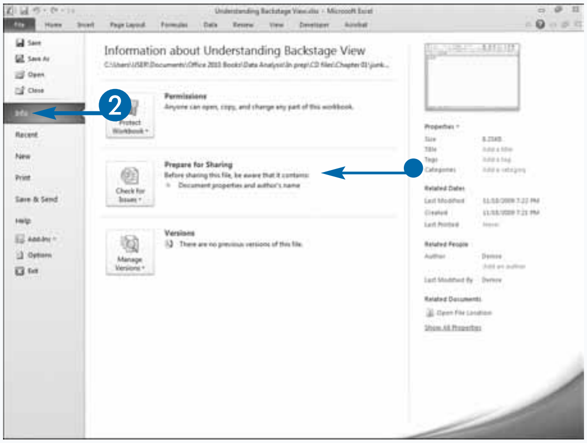
① Click the File tab.


Understanding Backstage View.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Acrobat
1
Sheet1
Sheet2
Sheet3
Ready
100%

The Backstage view options appear.

② Click an option to select it.

- Excel opens the option's pane.


Understanding Backstage View.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Developer
Acrobat
Save
Save As
Open
Close
Info
Recent
New
Print
Save & Send
Help
Add-Ins
Options
Exit
2
Protect Workbook
Check for Issues
Manage Versions
Properties
Related Dates
Related People
Related Documents
Open File Location
Show All Properties

Information about Understanding Backstage View

Permissions

Anyone can open, copy, and change any part of this workbook.

Prepare for Sharing

Before sharing this file, be aware that it contains:

- Document properties and author's name

Versions

There are no previous versions of this file.

Upload a File to Excel's Web-based Application

With the Microsoft Excel Web App, you can create and edit an Excel workbook even if you are on a computer that does not have Excel installed. For example, if your office e-mails you an Excel document while you are staying in a hotel, you can update it. With the Microsoft Excel Web App, you can use the hotel's community computer to make the changes even if it does not have Excel on it. You can use the Web App in any supported browser — Internet Explorer, Firefox, or Safari.

The Microsoft Excel Web App is part of Windows Live, a collection of free services offered by Microsoft that include e-mail, photo sharing, personal Web pages, and more. The Web-based application is included in SkyDrive. You can use SkyDrive to store files online and share them with others. To sign up for SkyDrive or to sign in to your SkyDrive account, go to http://skydrive.live.com. Signing up for a SkyDrive account is easy. Just click the Sign Up button and the Web site will prompt you through the process. If you have a Hotmail, Xbox LIVE, or any other type of Windows Live account, you already have a SkyDrive account.

You can use the Save to SkyDrive option in the Share section of BackOffice to save documents to SkyDrive. The Save to SkyDrive option lets you save any open file to a SkyDrive folder. By default, you have two SkyDrive folders: Public and My Documents. Documents you save to the Public folder are available to everyone. Documents you save to the My Documents folder are available only to you. You can also access an Excel file from a Share Point server that is running Web Apps.

Upload a File to Excel's Web-Based Application

① Sign-up for a SkyDrive account.

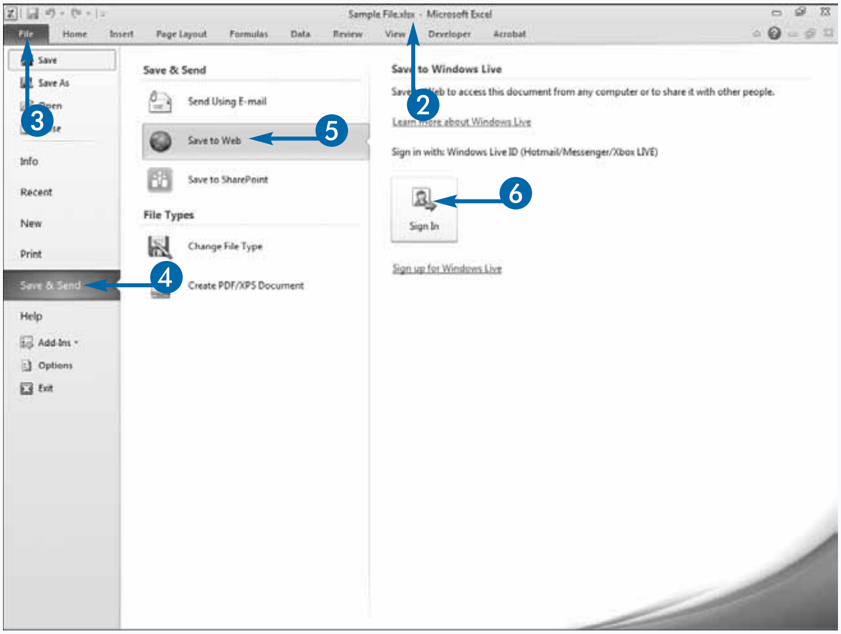
② Open the file you want to upload.

③ Click the File tab.

④ Click Save & Send.

⑤ Click Save to Web.

⑥ Click Sign In.

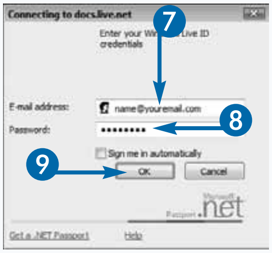

Sample File.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Developer
Acrobat
Save
Save As
Open
Close
Info
Recent
New
Print
Save & Send
Help
Add-Ins
Options
Exit
Save & Send
Send Using E-mail
Save to Web
Save to SharePoint
File Types
Change File Type
Create PDF/XPS Document
Save to Windows Live
Save Web to access this document from any computer or to share it with other people.
Learn more about Windows Live
Sign in with: Windows Live ID (Hotmail/Messenger/Xbox LIVE)
Sign In
Sign up for Windows Live
2
3
4
5
6

The Connecting to docs.live.net dialog box appears.

⑦ Type your e-mail address.

⑧ Type your password.

⑨ Click OK.


Connecting to docs.live.net
Enter your Wi Live ID credentials
Sign me in automatically
OK
Cancel
Microsoft Passport .net
Get a .NET Passport
Help
7
8
9

E-mail address: name@youremail.com

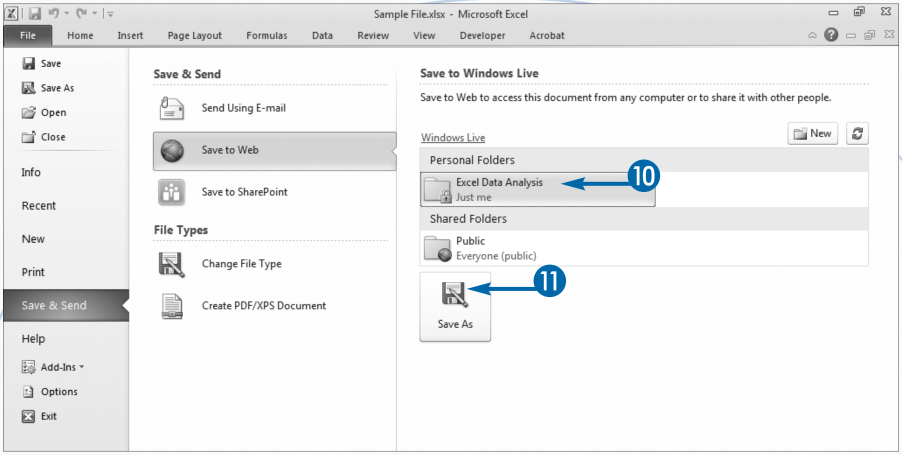
Password: ••••••••

☐ Sign me in automatically

The Save to Windows Live pane appears.

⑩ Click a folder.

⑪ Click Save As.


Sample File.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Developer
Acrobat
Save
Save As
Open
Close
Info
Recent
New
Print
Save & Send
Help
Add-Ins
Options
Exit
Save & Send
Send Using E-mail
Save to Web
Save to SharePoint
File Types
Change File Type
Create PDF/XPS Document
Save to Windows Live
Windows Live
New
Personal Folders
Excel Data Analysis
Just me
Shared Folders
Public
Everyone (public)
Save As
10
11

Save to Web to access this document from any computer or to share it with other people.

The Connect to doc.live.net dialog box appears.

⑫ Type your e-mail address

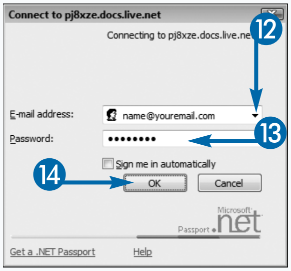
⑬ Type your password.

⑭ Click OK.

The Save As dialog box appears.

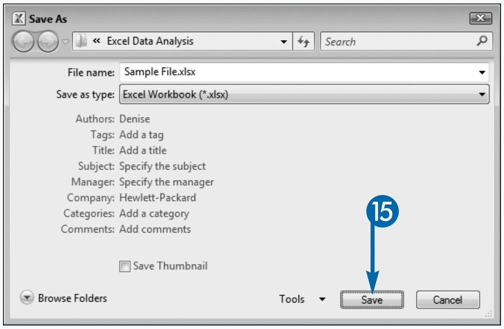
⑮ Click Save.

Excel saves your file to your SkyDrive account.


Connect to pj8xze.docs.live.net
Connecting to pj8xze.docs.live.net
Sign me in automatically
OK
Cancel
Microsoft
Passport
net
Get a .NET Passport
Help
12
13
14

E-mail address: name@youremail.com

Password: ••••••••


Save As
« Excel Data Analysis
Search
Save Thumbnail
Browse Folders
Tools
Save
Cancel
15

File name: Sample File.xlsx

Save as type: Excel Workbook (*.xlsx)

Authors: Denise

Tags: Add a tag

Title: Add a title

Subject: Specify the subject

Manager: Specify the manager

Company: Hewlett-Packard

Categories: Add a category

Comments: Add comments

Apply It

You can sign in to SkyDrive from Excel. Click the File tab. A menu appears. Click Share. The Share Pane appears. In the Share Pane, click Save to SkyDrive. The Save to SkyDrive pane appears. Next to Go To, click SkyDrive. You are taken to http://skydrive.live.com. You can log in to SkyDrive. If you are already logged in, you can access your SkyDrive files.

From Excel, you can create new SkyDrive folders. Log in to SkyDrive from Excel. In the SkyDrive pane, click New Folder. Excel takes you to the Create a Folder page. Enter the folder name in the Name field. In the Share With field, select how you want to share the file. Click Next. The Application creates the folder and provides you with an opportunity to upload files. Click Browse. Locate and click the file you want to upload. Click Open. You can upload up to five files at one time. Click Upload. SkyDrive uploads the files. To add additional files, click Add Files.

Create a File Using Excel's Web-based Application

You can create Excel files with Excel's Web-based application. For example, if the computer you are using does not have Excel, you can sign in to SkyDrive and create an Excel worksheet.

The look a feel of the Excel Web-based application is the same as the desktop application. To issue commands, you use the Ribbon. For the most part, the commands work exactly as they do in the desktop application. Therefore, as you are learning Excel, you are also learning the Web-based application. You will find, however, that the commands available to you are limited and are not as sophisticated as they are in the desktop application.

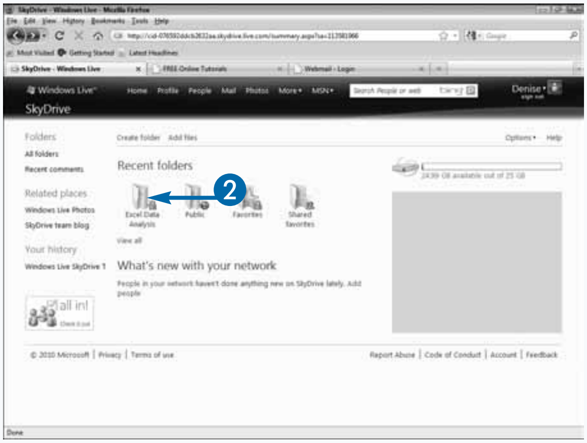
If you upload a file to SkyDrive, you can view most features. For example, you can upload and view a PivotTable and the sort and filter buttons are available to you. However, you cannot create a PivotTable in the Web-based application. You can view a chart, but you cannot create a chart. If you edit the data a chart is based on, the chart will update.

You cannot view comments, shapes, and a few other objects when using the Web-based application. If a workbook has any objects that you cannot view, the Web-based application will warn you when you attempt to view the workbook. You can view a workbook that has objects you cannot view in it, but you cannot edit it. If you need to edit the workbook, use the File menu to make a copy of the file and then edit the copy.

All the functions that are available to you in Excel are available to you in the Web-based application.

Create a File Using Excel's Web-Based Application

1. Sign in to SkyDrive.
2. Click the folder where you want to store the file.

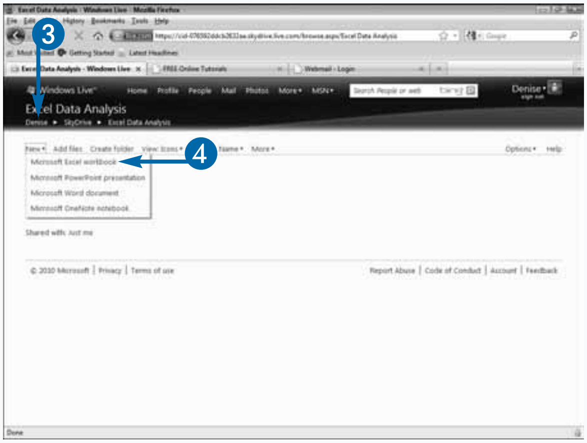

SkyDrive
Folders
All folders
Recent comments
Recent folders
Excel Data Analysis
Public
Favorites
Shared favorites
What's new with your network
2

You move to the folder.

3. Click New.

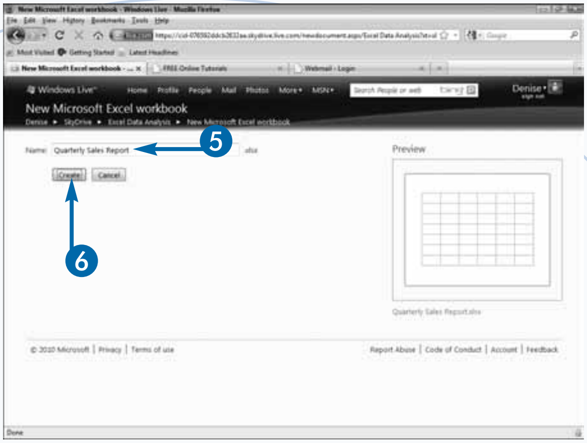
A menu appears.

4. Click Microsoft Excel workbook.


Excel Data Analysis
New
Add files
Create folder
Microsoft Excel workbook
Microsoft PowerPoint presentation
Microsoft Word document
Microsoft OneNote notebook
3
4

The New Microsoft Excel workbook page appears.

5. Type a name.
6. Click Create.



Name: Quarterly Sales Report .xlsx

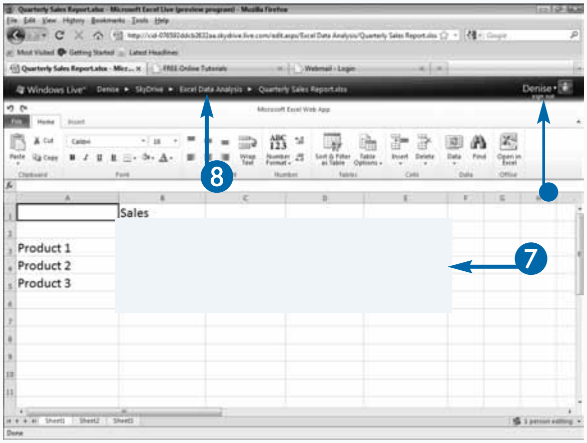
The Microsoft Excel Web App opens.

7. Create your document.
8. Click a path location.

Exit the file.

You do not need to save the file.

- Click here to sign out.



Sales
Product 1
Product 2
Product 3

Apply It

You can view a workbook in SkyDrive. Sign in to Sky Drive. Click the folder where you saved the file. Click the file and then click View. The file opens in the Web-based application. If you want to edit the file, click Edit. The file opens in the Microsoft Excel Web App and you can edit the file.

You can edit a workbook in SkyDrive. Sign in to Sky Drive. Click the folder where you saved the file. Click the File. Click Edit. The file opens in the Microsoft Excel Web App. You can edit the file. Click a path location at the top of the page to exit the file.

In the Microsoft Excel Web App you can view a workbook that has objects in it that you cannot view, such as comments. However, if you want to edit the file, you must make a copy of the file and edit the copy. To make a copy of the file, click File. Click Save a Copy. Excel displays a message stating the unsupported features will not be saved. Click Yes. Enter a new filename and then click Save. Excel saves the file.

Enter Data

Worksheets divide information into rows and columns of data. People often use worksheets to calculate financial, statistical, or engineering data. Microsoft Excel is an electronic worksheet. You can use it to enter, display, manipulate, analyze, and print the information you organize into rows and columns.

Each Excel worksheet has more than 1 million rows and more than 16,000 columns. Excel labels each row in numerical order, starting with 1. Excel labels each column in alphabetical order, starting with A. When Excel reaches the letter Z, it begins ordering with AA, AB, AC, and so on. You refer to the intersection of a row and column as a cell. The intersection of a row and column also forms the cell name. For example, you refer to the first row in column A as cell A1 and the seventh row in column C as cell C7. When using Excel, you enter your data into worksheet cells.

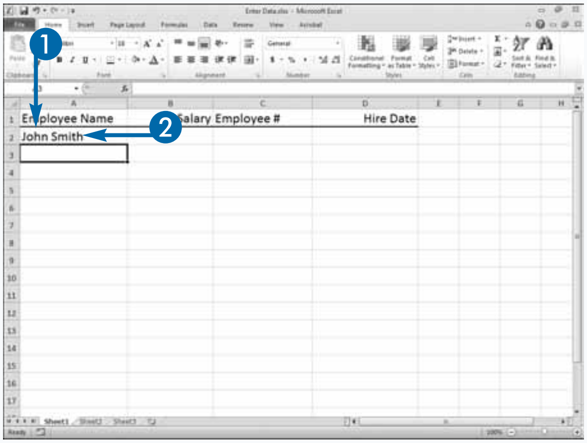
To move to a cell, move your mouse pointer to the cell and then click in it. The cell becomes the active cell and Excel surrounds it with a black border. Once in a cell, you can use the arrow keys on your keyboard to move up, down, left, and right. You can enter text, numbers, dates, and formulas into cells.

Alphabetic characters and numerical data you do not use in mathematical calculations are text. Excel considers any sequence of characters that contains a letter text. By default, Excel considers all numerical data numbers. If you wish to enter numerical data as text, precede your entry with an apostrophe.

As you type, the data you enter into a cell appears on the formula bar. You can click Enter — the check mark on the formula bar — or you can press the Enter key to enter your data into a cell.

Enter Data

Enter Text

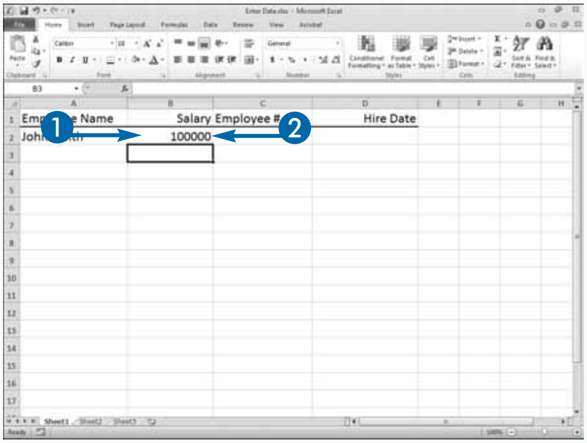


1. Click in a cell.
2. Type the text.
3. Press Enter.

Excel enters the text and then moves down to the next cell.

Alternatively, you can click Enter (✔) — the check mark on the formula bar.

Enter Numbers

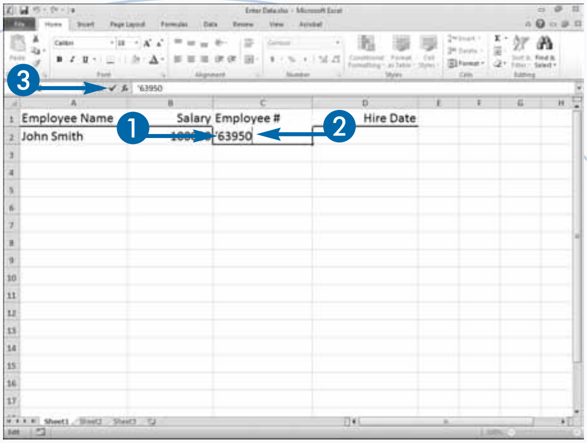


1. Click in a cell.
2. Type the number.
3. Press Enter.

Excel enters the number and then moves down to the next cell.

Alternatively, you can click ✔ on the formula bar.

Enter Numbers as Text


Enter Data.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Acrobat
1
2
3

'63950

	A	B	C	D
1	Employee Name	Salary	Employee #	Hire Date
2	John Smith	[illegible]	'63950	

① Click in a cell.

② Type an apostrophe followed by the number.

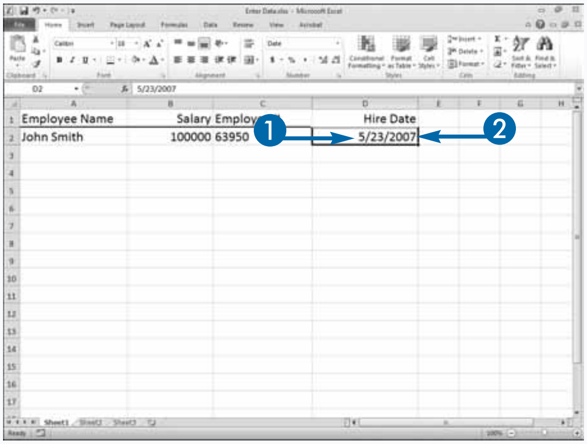
③ Click ✔ on the formula bar.

Excel enters the number as text.

Alternatively, press Enter.

If you receive an error, click the Error button (◈) and then click Ignore Error.

Enter Dates


Enter Data.xlsx - Microsoft Excel
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Acrobat
1
2

D2 5/23/2007

	A	B	C	D
1	Employee Name	Salary	Employee #	Hire Date
2	John Smith	100000	63950	5/23/2007

① Click in a cell.

② Type the date.

③ Click ✔ on the formula bar.

Excel enters the date.

Alternatively, press Enter.

Extra

When you enter numbers as text, an Error button (◈) may appear. Excel is checking to see if you entered the number as text by mistake. You should click the button and then click Ignore Error.

When you press Enter after typing an entry into a cell, by default, Excel moves down one cell. If you want Excel to move to the cell to the right, press the right-arrow key or the Tab key. If you want Excel to move up, press the up-arrow key. If you want Excel to move to the left, press Shift+Tab or the left-arrow key.

By default, when you press the Enter key after typing an entry, Excel moves down one cell. You can change the default location to which Excel moves. Click the File tab. A menu appears. Click Options. The Excel Options dialog box appears. Click Advanced. Make sure the After Pressing Enter, Move Selection check box is selected and then choose Right, Up, or Left in the Direction field to cause Excel to move right, up, or left when you press Enter. Click OK.

Select Cells

Before you can execute an Excel command, you must select the cells to which you want the command to apply. For example, if you want to bold several cells, you start the process by selecting the cells. The most common way to select cells is to click and drag. Excel highlights the selected cells. The range of cells you select does not have to be contiguous. You can hold down the Ctrl key as you click and drag to select multiple ranges of cells. If you select multiple ranges of cells, Excel highlights each selected range. If you do not hold down the Ctrl key, Excel deselects the first range of cells when you begin to select a new range of cells.

You can select a single cell or the entire worksheet. To select a single cell, click in the cell. To select every cell in a worksheet, click the Select All button or press Ctrl+A.

To select an entire row or an entire column, simply click the row or column identifier. For example, to select all the cells in column C, click the C identifier for the column. To select multiple columns, click the first column and then continue holding down the mouse button as you drag to the other columns you want to select. To select entire rows, click the row identifiers on the left side of the rows.

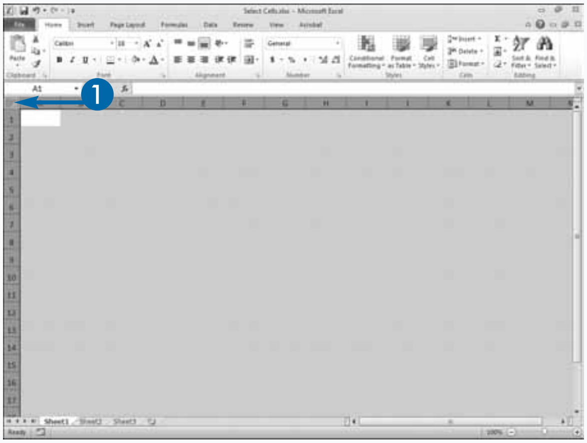
You can quickly select a large range of cells by clicking in the first cell you want to select, holding down the Shift key, and then clicking in the last cell you want to select.

Select Cells

Select the Entire Worksheet

1. Click the Select All button (◢).

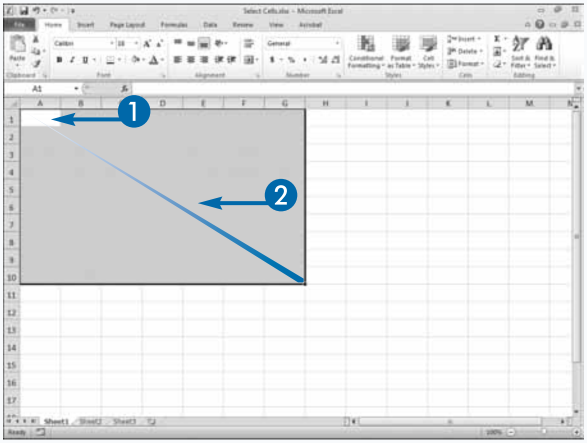
   Alternatively, press Ctrl+A.



Select Contiguous Cells

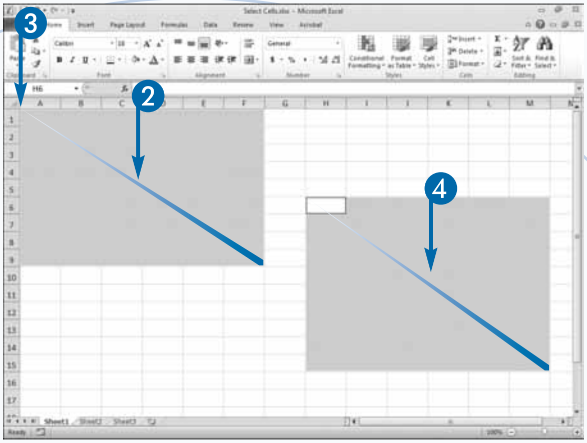
1. Click the first cell.
2. Drag to the last cell.

   Alternatively, click the first cell, hold down the Shift key, and then click the last cell.



Select Noncontiguous Cells

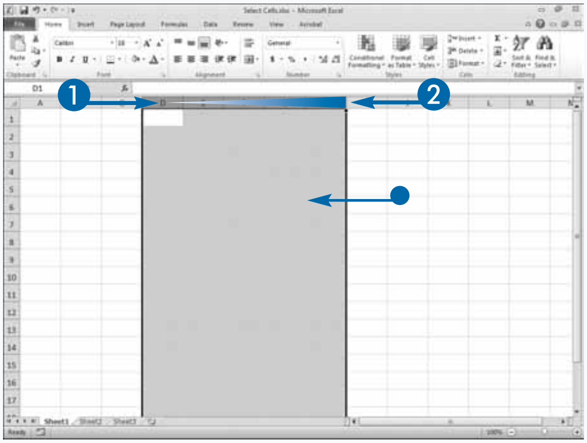
1. Click the corner of the first block of cells.
2. Drag the mouse to highlight the desired cells.
3. Press Ctrl.
4. Repeat Steps 1 and 2 to select the next block of cells.
5. Repeat Steps 3 and 4 to select additional cell ranges.



Select Columns or Rows

1. Click the label for the first column or row you want to select.
2. Drag to the last column or row you want to select.

- Excel selects the columns or rows.



Apply It

You can easily select all cells with formulas, comments, conditional formatting, constants, or data validation. Click the Home tab. Click Find & Select in the Editing group. A menu appears. Click the option you want. Excel selects all the cells that contain the option you selected. For example, if you chose Formulas, Excel selects all the cells that contain formulas.

You can also use the arrow keys to select cells. Click in any cell, hold down the Shift key and then use the left, right, up, and down arrow keys to expand your selection.

You can press Ctrl+Shift+an arrow key to select everything from the active cell to the next blank cell that is to the right, to the left, above, or below the active cell.

You can press Ctrl+Shift+* to select a block of cells. You will find this option particularly useful with large tables. For a list of keyboard shortcuts, see the Appendix.

Using the Ribbon to Format Numbers

By applying formatting, you can change the way numbers display. For example, you can use Excel's formatting options to tell Excel you want to separate thousands or show decimal places. Formatting makes your data easier to read and helps you conform to company, country, or industry standards. Excel provides a variety of options for formatting numbers.

When you type numbers into a cell, in most instances they appear in the format you type them. However, if the number has decimal places and is too long to fit in the cell, Excel rounds the number. If the number is longer than 12 digits, Excel displays the number in scientific notation. If the number has leading or trailing zeros, Excel drops the zeros. For example, Excel displays both 0123 and 123.00 as 123.

The Number group on the Home tab has several buttons you can use to format numbers quickly. If you choose Comma Style, Excel separates the thousands with a comma, adds two decimal places, displays negative numbers in parentheses, and represents zeros with a dash (–).

The Accounting Number Format field has several currency formats you can choose from, including the United States currency format, the United Kingdom currency format, and the Euro currency format. For example, if you choose the United States currency format, Excel adds a dollar sign and aligns it with the left side of the cell, adds two decimal places, and displays negative numbers in parentheses. You can click the Increase Decimal or Decrease Decimal buttons to increase or decrease the number of decimal places that appear.

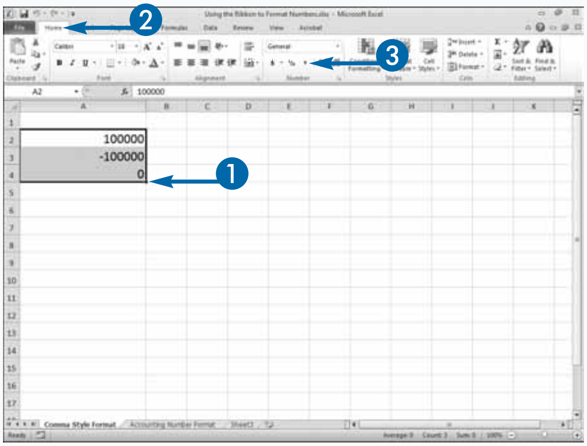
Using the Ribbon to Format Numbers

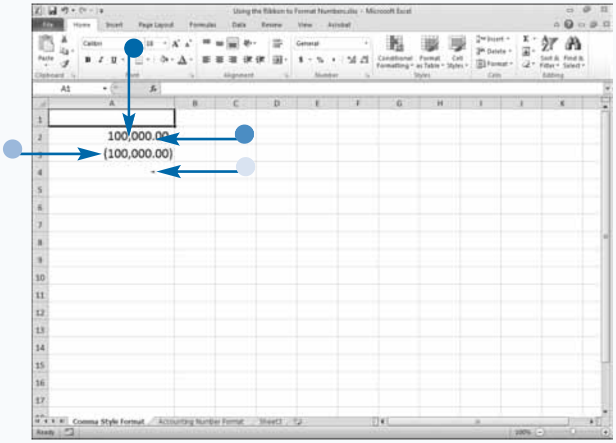
Comma Style Format

① Select the cells you want to format.

② Click the Home tab.

③ Click the Comma Style button (,).



- Excel separates the thousands.
- Excel adds two decimal places.
- Negative numbers appear in parentheses.
- Zeros are represented by a dash.