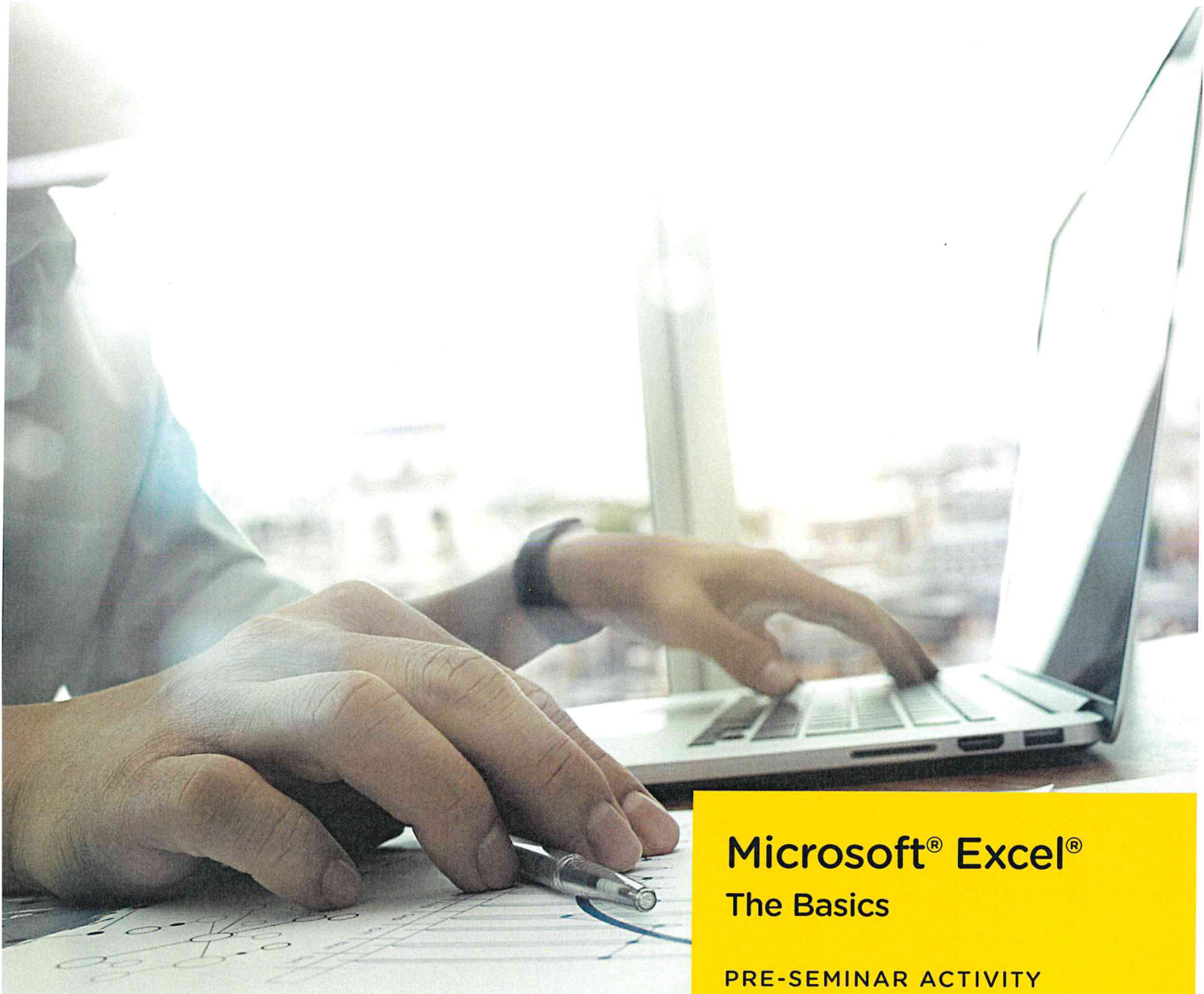




PRYOR
Learning · Solutions

FRED PRYOR SEMINARS
CAREERTRACK.



Microsoft® Excel® The Basics

PRE-SEMINAR ACTIVITY

PRYORITIZE LEARNING.

DISCLAIMER: Purchasers, readers, or users of this course agree to be bound by the following terms: Information contained in this course has been obtained by Pryor Learning Solutions from sources believed to be reliable. The subject is constantly evolving, and the information provided is not exhaustive. The advice and strategies contained should not be used as a substitute for consulting with a qualified professional where professional assistance is required or appropriate, or where there may be any risk to health or property. In no event will Pryor Learning Solutions or any of its respective affiliates, distributors, employees, agents, content contributors, or licensors be liable or responsible for damages including direct, indirect, special, consequential, incidental, punitive, exemplary losses, or damages and expenses including business interruption, loss of profits, lost business, or lost savings. For purposes of illustrating the concepts and techniques described in this course, the author has created fictitious names; mailing, e-mail, and internet addresses; phone numbers and fax numbers; and similar information. Any resemblance of this fictitious data that is similar to an actual person or organization is unintentional and purely coincidental.



©2018 Pryor Learning Solutions, Inc. Registered U.S. Patent & Trademark Office and Canadian Trade-Marks office. Except for the inclusion of brief quotations in a review, no part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Pryor Learning Solutions, Inc.



Getting Ready

What Are Your Excel Challenges?

1. Check all that apply
2. Rank the checked challenges from most to least important.
 - Organizing data for the best results _____
 - Finding commands and tools in the Excel user interface _____
 - Slow and inefficient data entry _____
 - Data looks messy and is hard for others to read _____
 - Difficulty creating calculations and inputting formulas _____
 - Printouts are spread across too many pages and are hard for my team to read _____
 - Making sense of raw data to hand to decision-makers _____
 - Determining which charts or graphs will best illustrate my data _____
 - Repeating the same simple tasks over and over _____

Set Goals

On a scale of 1-10, what is your current comfort level with Excel? _____

What are the one or two skills you most hope to learn (or challenges you hope to overcome) to increase your comfort level?

Understanding that this is an entry-level seminar, on a scale of 1-10, where do you hope to be at the end of the day? _____



Get the Most Out of Your Seminar

Gather Data

What work do you usually do in Excel? (Example: mail merges, recording sales and calculating profits, charting trends, etc.)

How do you usually get your data into Excel?

- A. Type it in one cell at a time
- B. Receive complete workbooks from source (such as a Bank Account export or colleague)
- C. Import data from external source (such as a shared database or website)
- D. Copy/Paste from source
- E. Other: _____

Things to Bring

Do you often leave a seminar and on the drive home think "Rats! I meant to write down the instructor's tips about printing?" Try bringing specific questions and example "problems" to keep in mind as you participate so you won't miss or forget an important tip you were looking for. Consider bringing one or more of the following:

- One or two pages of an existing Excel worksheet that you would like to improve
- A list of the data you would like to organize into a spreadsheet (example: House Address, # of Bedrooms, Asking Price, %Commission)
- A calculation that you are having trouble with (example: want to calculate amount of commission based on a home's asking price and %commission)
- A series of steps you repeat frequently (example: highlight cells, bold text, change number format to %)
- A list of questions you will be listening for answers to (example: How do I bold cell text?)

Identify and write down solutions to your example problems during the seminar.



Familiarize Yourself with Excel's User Interface

During the seminar, you will be spending a lot of time immersed in Excel's user interface at the guidance of your experienced instructor. The more familiar you are with Excel's main tabs and ribbons, the more you will get out of the details that are presented. If you have time, complete the following practice tasks before you attend your seminar. Jot down questions that come up as you complete the tasks and add them to your list of "answers you are listening for" above.

Explore Ribbons

- Open a new, blank Excel workbook
- Click on each tab. For each tab, find:
 - One group that you either use regularly and/or that you have never noticed before
 - One button/feature that you either use regularly and/or that you have never noticed before

	Home	Insert	PageLayout	Formulas	Data	Review	View
List one group (new or familiar)	Example: Editing						
List one button (new or familiar)	Example: Cell Style						

Explore Data Entry

- Type a number, a date, and a word into different cells. Observe how each is handled by Excel's defaults.
- Enter any data into any cell and hit **ENTER**, repeat and hit **TAB**.
- Type a number with decimals into any cell (example: 1.02). Select the cell, then change the cell number format from **General** to **Currency**, **Percentage**, and **Text** in turn. Observe the changes.



Explore Common Tasks

- Add a new worksheet to the workbook.
- Print any spreadsheet (with data) using only Excel defaults. Observe the page breaks, page orientation, and format (no cell borders, for example).
- Save an existing file with a new name and in a different folder. Observe the steps in the Office Backstage. (Office Backstage can be very different from version to version of Excel, so it will be helpful to be familiar with your version's Backstage before attending the seminar.)
- Change the color, font, or background fill of any cell that contains data.



PRYOR
Learning · Solutions

 **FRED PRYOR SEMINARS**

 **CAREERTRACK.**



Microsoft® Excel®
The Basics

SEMINAR WORKBOOK

**PRYORITIZE
LEARNING.**

PRYORITZE YOUR COMPUTER SKILLS

Microsoft Excel - The Basics



CONTINUE YOUR LEARNING:

Recommended products, digital media, webinars, and additional live training:

[Click Here](#) 



Online and Live Seminars,
and digital media –
pick what works for you
and your team 24/7.

pryor.com



Unlimited
Training



Online
Course



Live
Seminars
& Onsites



CareerStore



eBooks



eLearning
Library



Learning
Paths



Microsoft® Excel® The Basics

SEMINAR WORKBOOK

PRYORITIZE LEARNING.

NAME

EVENT NUMBER / DATE

800-556-2998

pryor.com

Microsoft, Excel, Windows, Word, Outlook, PowerPoint, Access, and Internet Explorer are all registered trademarks of Microsoft Corporation.

WX71802ES DISCLAIMER: Purchasers, readers, or users of this course agree to be bound by the following terms: Information contained in this course has been obtained by Pryor Learning Solutions from sources believed to be reliable. The subject is constantly evolving, and the information provided is not exhaustive. The advice and strategies contained should not be used as a substitute for consulting with a qualified professional where professional assistance is required or appropriate, or where there may be any risk to health or property. In no event will Pryor Learning Solutions or any of its respective affiliates, distributors, employees, agents, content contributors, or licensors be liable or responsible for damages including direct, indirect, special, consequential, incidental, punitive, exemplary losses, or damages and expenses including business interruption, loss of profits, lost business, or lost savings. For purposes of illustrating the concepts and techniques described in this course, the author has created fictitious names; mailing, e-mail, and internet addresses; phone numbers and fax numbers; and similar information. Any resemblance of this fictitious data that is similar to an actual person or organization is unintentional and purely coincidental.

©2018, 2017, 2016, 2015, 2011, 2010, 2009 Pryor Learning Solutions, Inc. Registered U.S. Patent & Trademark Office and Canadian Trade-Marks office. Except for the inclusion of brief quotations in a review, no part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Pryor Learning Solutions, Inc.



Course Goals

Specific Topics I Would Like to Learn about Today:

➔ # Schedule 10 min/day for learning Excel

➔

➔

➔

➔

3 keys to learning Excel

1) Awareness

2) Structure

3) Take Action

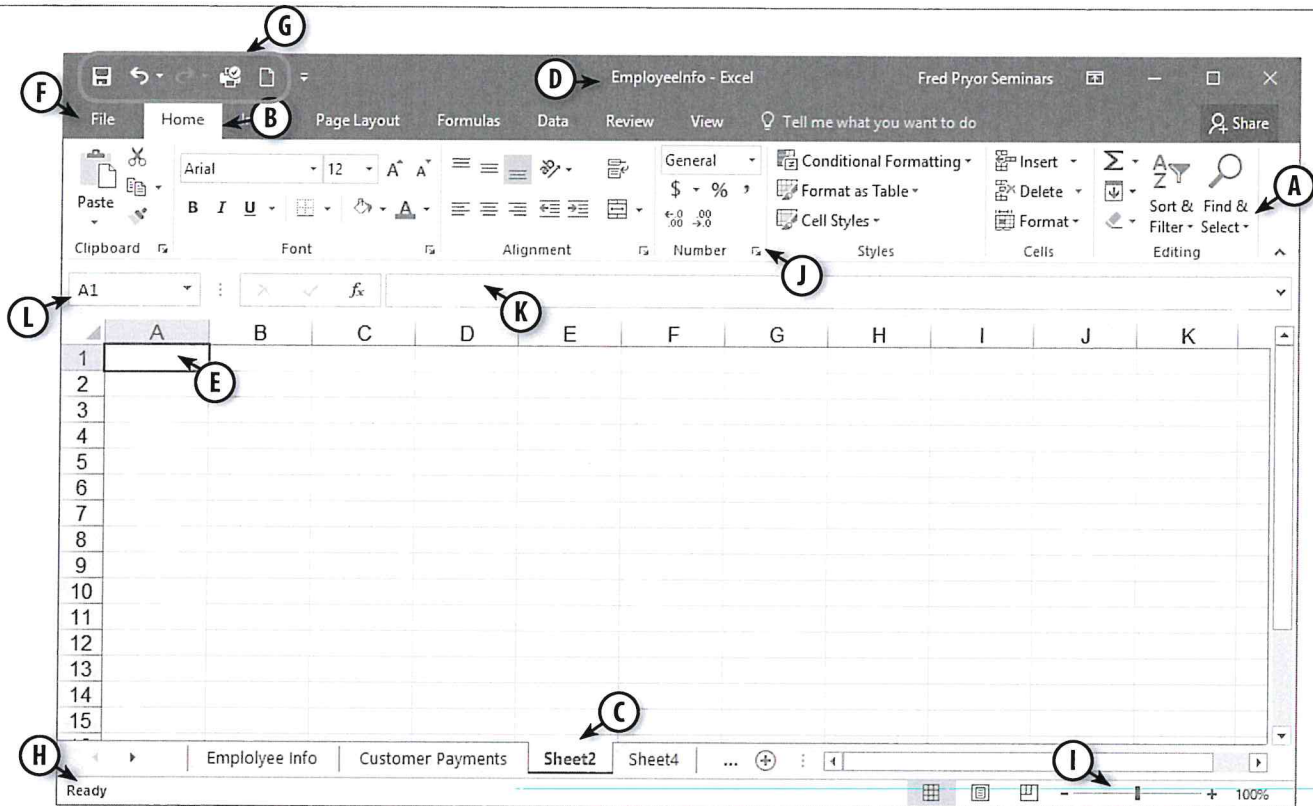


Table of Contents

Course Goals	i
Table of Contents	ii
Getting Started	
Elements of the Excel Window	1
The File Tab and Office Backstage	2
Save Your Workbook	3
Customize the Excel Environment	4
Seven Steps to Worksheet Success	5
Design and Build	
Use a Template	7
Enter Data	8
Use the AutoFill Handle	9
Work with Cells, Rows, and Columns	10
Insert, Move, Copy, and Rename Worksheets	11
Calculate and Format	
Formulas	12
Functions	16
Make Your Data Look Polished	18
Copy and Paste Formats	19
Organize and Display Data	21
Sort Data	22
Hide Data	23
Filter Data	24
Report, Print, and Automate	
Create Charts	25
Chart Types and Terminology	26
Sparklines	27
Print	29
The Page Setup Dialog	30
Macros	31
Appendix	
Unassigned Keystrokes	32
Compatibility Between Excel Versions	33
Data Forms	34
Freeze Panes	35
Split Workbooks	36
Add Pictures, Clip Art, and Shapes	37
Add SmartArt	38
Group Data	39
Embedding Excel Spreadsheets into Word or PowerPoint	40
Resources	41



Elements of the Excel Window

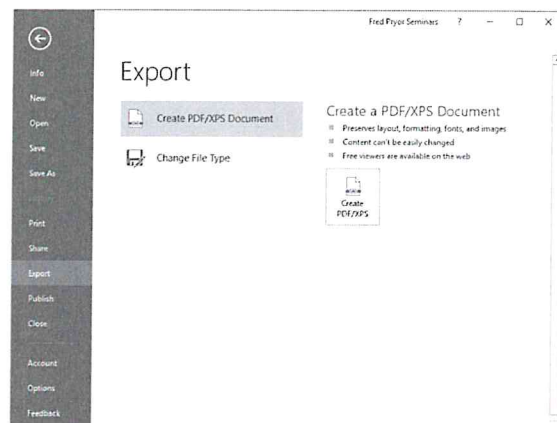
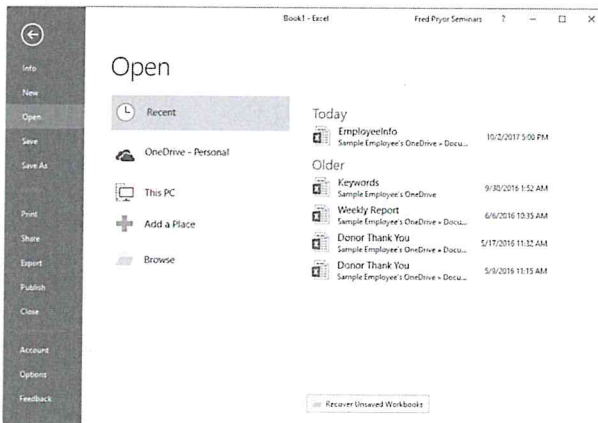
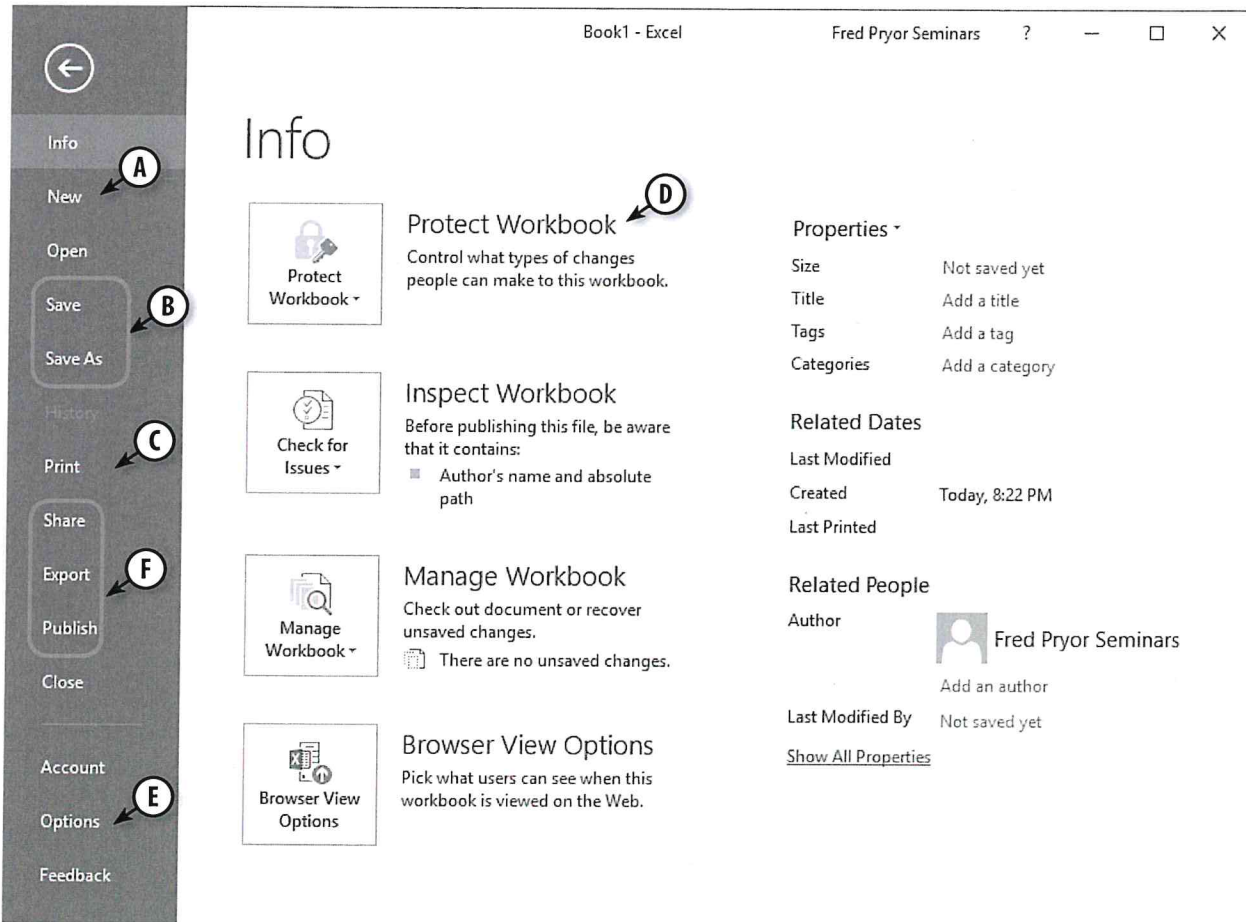


A	Ribbon	The strip of buttons and icons above the work area.
B	Tabs	A collection of functionally- related controls and menus.
C	work sheet	An individual spreadsheet with rows & columns or a chart.
D	Work book	A file containing multiple worksheets.
E	Marquee	Marks the currently active cell or range.
F	File tab	Provides access to options such as open, save, print, etc.
G	Quick Access Toolbar	Stores shortcuts to frequently used features.
H	Status Bar	Hosts specific shortcuts and information about a workbook.
I	ZOOM	Controls the magnification of the screen.
J	Display Box Launcher	Launches the associated dialog box.
K	formula Bar	Displays the contents of the currently active cell.
L	Name Box	Displays the name of the currently active cell.



The File Tab and Office Backstage

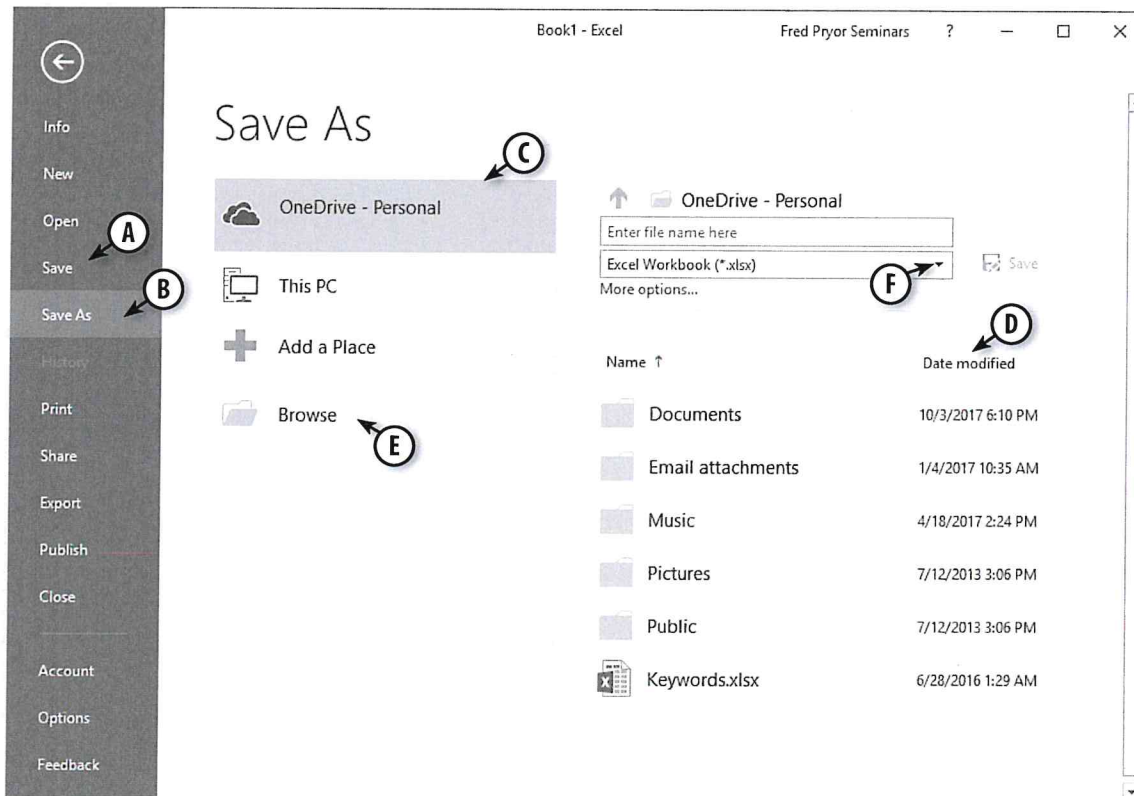
The **File** tab takes you to the **Office Backstage** where you will find all the tools you need to help you create **[A]**, save **[B]**, print **[C]** and manage your workbooks. This is also where you can password protect your documents **[D]**, customize your copy of Excel **[E]** and prepare your documents for sharing **[F]**. Click the back-arrow to return to your worksheet.





Save Your Workbook

Everyone has experienced the pain of losing hours of work because of not saving. The best way to prevent this from happening is to save early – as soon as a new document is created, as this is what triggers the AutoSave process to start – and often – each time a significant set of changes has been made.



1. Click the **File** tab.
2. Choose one of two options:
 - a. Click **Save** [A] to update your file with your most recent changes.
 - b. Click **Save As** [B] to save a new file or save an existing file in a new format.
3. Choose a destination for your file from the **Places** list [C] or browse the default folders list [D] or click **Browse** [E] to open the Windows dialog box.
4. Choose a file type [F].

Excel 2007 and 2010:	Mac 2011 and 2013/365
<ol style="list-style-type: none"> 1. Click the File tab (Office Button in Excel 2007). 2. Choose Save or Save As to open the Windows dialog box. 	<ol style="list-style-type: none"> 1. Open the File system menu. 2. Choose Save or Save As from the dropdown menu.

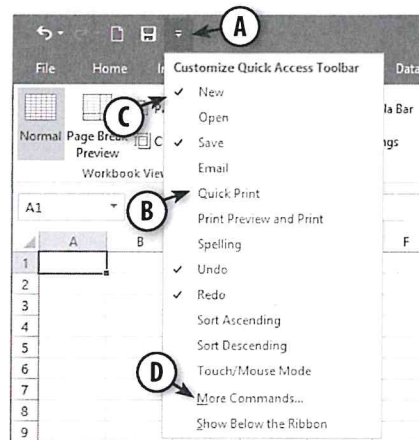


Customize the Excel Environment

Customizing the Quick Access Toolbar (QAT) and the Status Bar saves time and makes Excel use more efficient.

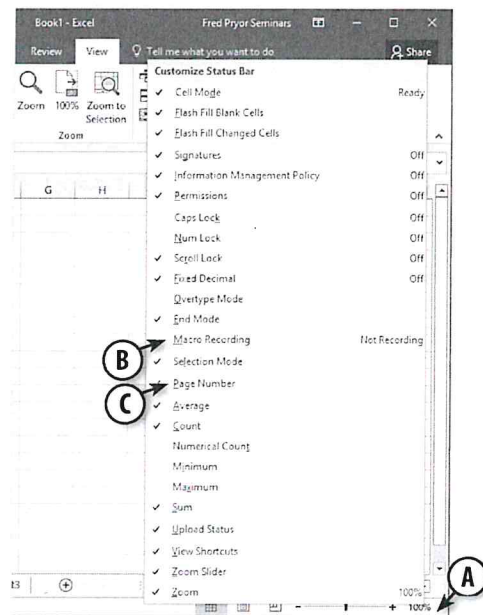
Customize the QAT:

1. Click the **Customize Quick Access Toolbar** dropdown arrow [A].
2. Take one of three actions:
 - a. Select an **unchecked** item to add [B].
 - b. Select a **checked** item to remove [C].
 - c. Select the **More Commands** option [D] to view additional options.

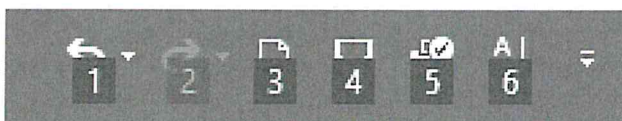


Customize the status bar:

1. Right-click the **Status Bar** [A].
2. Take one of two actions:
 - a. Select an unchecked item to add [B].
 - b. Select a checked item to remove [C].



Quickly access QAT commands by clicking **ALT+(Number)**.



In Excel 2010 and later, custom tabs and groups can be added to the ribbon and populated with any available command or macro. To add a tab or group, select **File > Options**, then click the **Customize Ribbon** control. Select any top level item and click the **New Tab** button to add a tab, or the **New Group** button to add a group to that tab.



Seven Steps to Worksheet Success

Creating a worksheet can be frustrating and tedious, but following the **Seven Steps to Worksheet Success** can minimize this frustration. There are exceptions to every rule, but using these steps – in order – as a guide will often prevent wasted time and effort.



Before You Begin

Take some time to think about what your data needs to do and how it should look. Consider using a mind map.

Considerations:

1. Is Excel the right tool for this project?
2. What kind of data is being captured?
3. How do I want my columns & rows organized?
4. Is performing mathematical calculations on your data your primary purpose? (If not, strongly consider using **MS Access** instead of Excel.)



Notes

Handwriting practice area consisting of multiple horizontal lines.



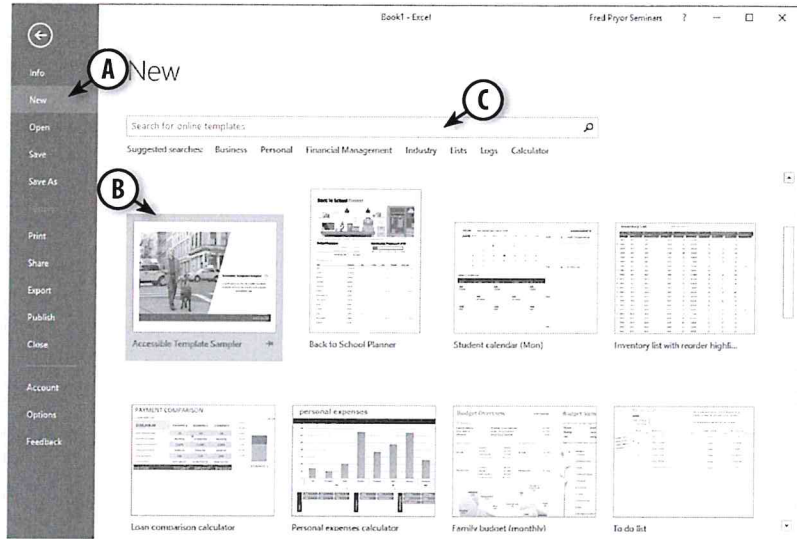
Use a Template

Once you have answered the **Before You Begin** questions you are ready to design your worksheets. The fastest way to get started may be to find a template that already meets all of most of your design needs.

1. Click the **File** tab.
(Office Button in Excel 2007)
2. Select **New** [A].

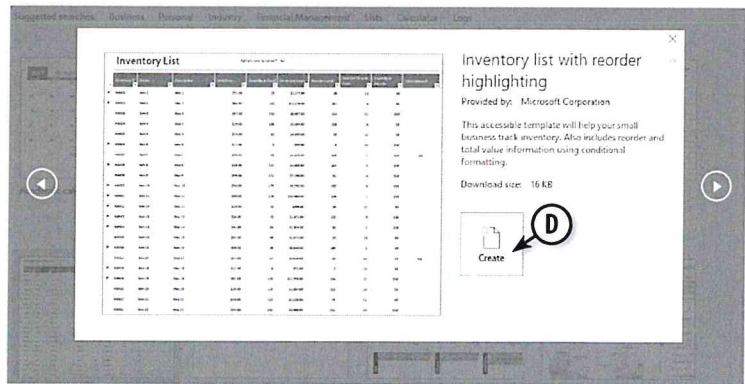
Excel 2013-2016/365

1. Choose from Excel's many built-in **Available Templates** [B] or search for more templates online using the search box [C] (internet connection required). Click on a template to view more information.
2. Click **Create** [D].



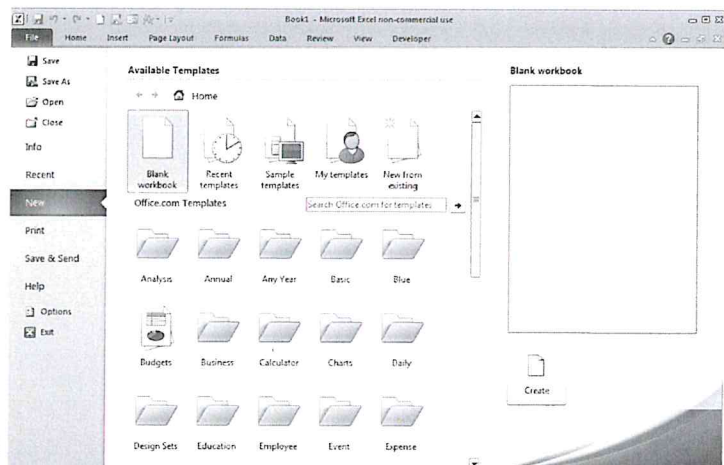
Excel 2007-2010

1. Click a template group option (**Blank workbook, Recent templates, etc.**) or click on a topic category under **Office.com Templates** to browse and download additional templates.
2. Select the template you want to open.
3. Click **Create**.



Mac 2011-2016/365

1. Open the **File** system menu.
2. Choose **New from Template** from the dropdown menu.
3. Select the template you want in the dialog box.



Excel 2010



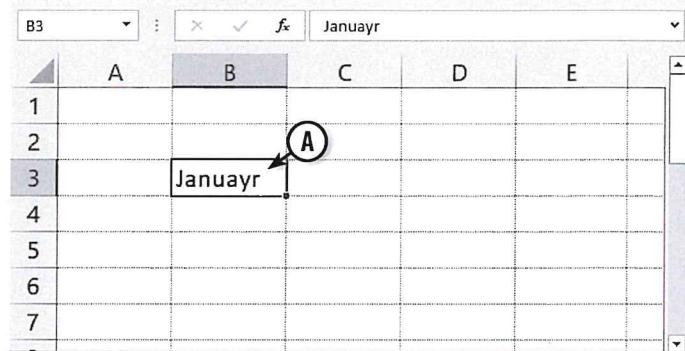
Enter Data

Type information in a cell:

1. Select an empty cell.
2. Type the information.
3. Press the **ENTER** or **TAB** key on the keyboard.

Edit information in a cell:

1. Select the cell containing the information to be edited [**A**].
2. Press the **F2** key on the keyboard or double-click the cell.
3. Make any needed changes.
4. Press the **ENTER** or **TAB** key on the keyboard.



Replace information in a cell:

1. Select the cell containing the information to be replaced [**A**].
2. Type the new information.
3. Press the **ENTER** or **TAB** key on the keyboard.

Five things that can go in an Excel worksheet:

1. _____
2. _____
3. _____
4. _____
5. _____



Use the AutoFill Handle

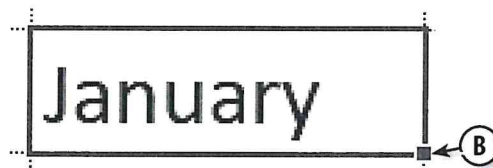
Fill a series:

- Select a cell containing data that can be used to fill a series [A].
- Left-click on the **AutoFill Handle** [B], then drag up, down, left, or right to fill the series.

	November		
	December		
December	January	February	March
	February		
	March		

Fill a value:

1. Select the cell containing the value to be copied [C].
2. Press and hold the **Ctrl** key on the keyboard.
3. While holding the **Ctrl** key down, left-click and drag the fill handle left, right, up, or down.



1st Qtr	Monday	9/1/2017	January
2nd Qtr	Tuesday	9/2/2017	January
3rd Qtr	Wednesday	9/3/2017	January
4th Qtr	Thursday	9/4/2017	January
1st Qtr	Friday	9/5/2017	January



For more fill options, click the **AutoFill Options** dropdown arrow [D].

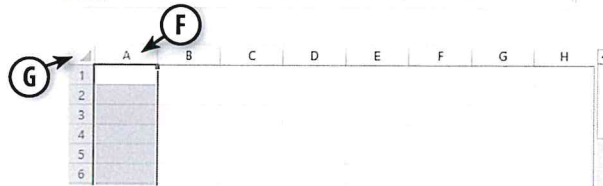
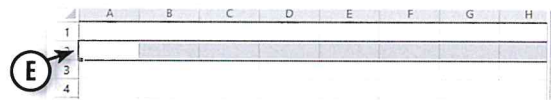
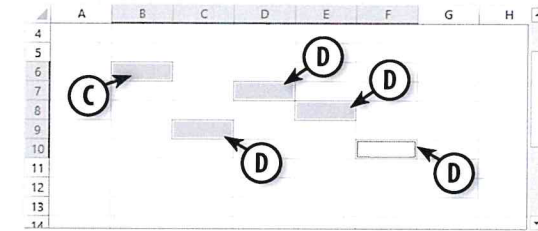
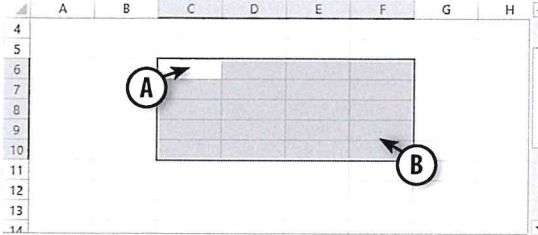
- Copy Cells
- Fill Series
- Fill Formatting Only
- Fill Without Formatting
- Fill Months
- Flash Fill



Work with Cells, Rows, and Columns

Select cells, columns and rows:

- **The SHIFT Key:** Click the first cell, [A] then press and hold the **SHIFT** key while selecting a second cell [B] to select all cells between the two.
- **The Ctrl Key:** Click the first cell [C], then hold down the **Ctrl** key while selecting additional cells [D] to select individual clicked items.
- **Row or Column Headers:** Click a **Row [E]** or **Column [F]** Header to select an entire row or column. Click and drag across several **Column** or **Row Headers** to select multiple rows and columns, or use the techniques above.
- **The Sheet Selection Button:** Select an entire worksheet by clicking the **Sheet Selection** button [G]. The same selection can be made by pressing **Ctrl+AA** on the keyboard.



Other Options

CONTROL+ARROW: Jumps from the active cell to the last entry in a column or row.

SHIFT+ARROW: Highlights one cell at a time in the direction of the arrow.

Ctrl+SHIFT+ARROW: Selects an entire row or column (stopping at blank cells)

Insert or delete rows or columns:

1. Select the rows or columns to be deleted, or the number of rows or columns to be inserted [H].
2. Right-click any selected cell and select **Insert** or **Delete [I]**.

Keyboard Shortcuts:

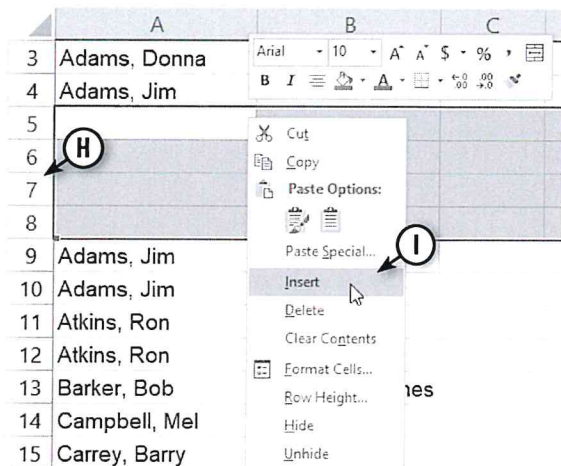
Cut » Ctrl + _____

Copy » Ctrl + _____

Paste » Ctrl + _____

Undo » Ctrl + _____

Redo » Ctrl + _____





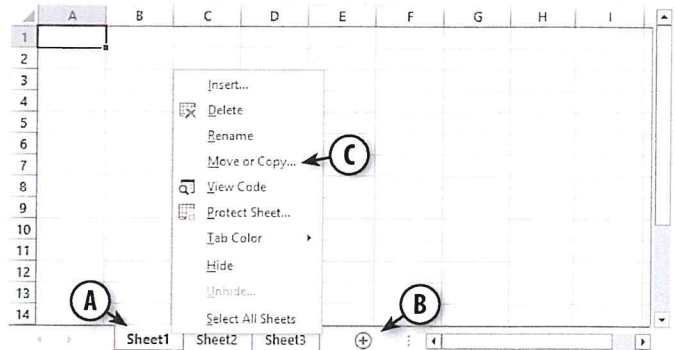
Insert, Move, Copy, and Rename Worksheets

Insert a new, blank worksheet:

Click the **Insert Worksheet** button [A].

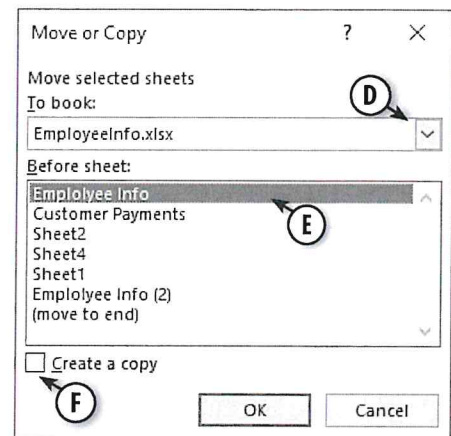
Reposition a worksheet:

Left-click and drag the worksheet tab to a new location.



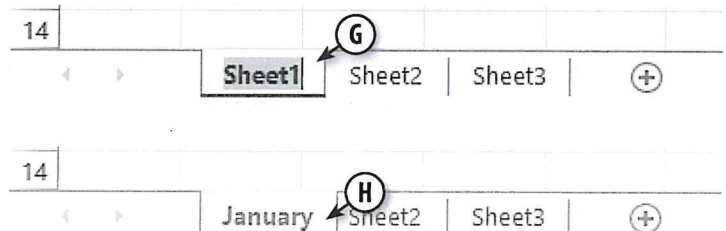
Move or copy a worksheet:

1. Right-click the tab for the worksheet to be moved or copied [B].
2. Select **Move or Copy** [C] from the right-click menu.
3. Select the destination workbook for the moved or copied sheet from the **To book** dropdown menu [D]. The current workbook is selected by default.
4. Select the worksheet position in the destination workbook in the **Before Sheet** pane [E].
5. Click the **Create a copy** checkbox [F] to create a copy of the sheet or leave it unchecked to move the sheet.
6. Click the **OK** button.



Rename a worksheet:

1. Double-click the tab for the sheet to be renamed [G].
2. Type the new sheet name [H].
3. Press **Enter**.



To copy a sheet quickly, press and hold the **Ctrl** key while clicking and dragging the sheet tab to new location.



Formulas

Data calculation and analysis are the primary reasons to use Microsoft Excel.

Formulas are a key element in effective calculation, and understanding how they work is an integral part of getting the most out of the program.

Rule #1: All formulas must begin with an equal sign (=).

Rule #2: Math in formulas is carried out left to right according to the "Order of Operations."

Function	Operator	Example	Power Phrase
Parentheses	()	$2*(3+2)=10$	Please
Exponents	^	$3^2=9$	Excuse
Multiplication	*	$3*2=6$	My
Division	/		Dear
Addition	+	$3+2=5$	Aunt
Subtraction	-	$3-2=1$	Sally

Which is the correct answer?
 $=5+6*10$
 110 or 65'



Calculate the answer to this problem using the Order of Operations.

$$=3+6*(4+2)/3-7$$



Formulas

Cells in formulas

When the value of a cell is used in a formula, it is called a "cell reference." Cell references (or cell "addresses") include two components: a column reference and a row reference. Column references are always letters, while row references are always numbers.

The cell reference for the value "12" in the grid shown here is C2.

	C	D	E
1	Amount 1	Amount 2	Total
2	12	6	
3	9	14	
4	18	2	

Reference	Syntax	Example
In the same workbook, in the same worksheet	C3	C3
In the same workbook, but on a different worksheet	Sheetname!C3	'June Reports'!C3
In a different workbook	[WorkbookName]Sheetname!C3	'[Q1_Sales]June Reports'!C3

Single quotes are needed if the name of the worksheet or workbook contains a space.



Use the "point & click" method to have Excel automatically build your formulas with the proper syntax!

2 keys to better formulas

- 1) Put it in words first
- 2) Convert the words to cell addresses

KRYSTINE
CHRISTINE



Formulas



To the right are the prices of four products, the associated shipping charges, and the tax rate. Create a formula in cell C4 that calculates the total price for each item, including tax and shipping.

Note: Only apply the tax to the item price, not to the shipping.

	A	B	C
1	Tax Rate	8.25%	
2			
3	Prices	Shipping	Total
4	\$12.00	\$2.00	
5	\$15.00	\$3.00	
6	\$18.00	\$4.00	
7	\$25.00	\$5.00	
8			

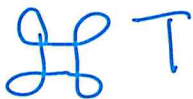
Formula: $(A4 \cdot \cancel{B\$1}) + A4 + B4$

Relative Vs. Absolute Referencing

In the above example, an error would have been generated if AutoFill had been used to fill the formula to C5, C6, and C7. The reason for the error is that Excel would have automatically converted cell B1 to B2, B3, and B4 in each copied formula. In order to prevent a formula from adjusting its values in this way, the values must be formatted as "absolutes." To do so, "anchor" each reference with special syntax.

When a \$ is applied to a cell reference, it has nothing to do with money. Instead, it becomes the anchor which holds the value in place. The \$ symbol tells Excel that the reference component to which it is applied should remain unchanged. A \$ may be applied to either or both components of a cell reference.

\$B1 B\$1 \$B\$1



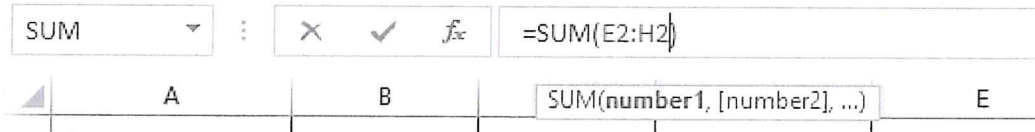


Functions

Think of functions as task-based, pre-programmed formulas. Functions are always formatted as follows:

$$=FunctionName(arguments)$$

Example:



AutoSum

Sigma (Σ), the mathematical symbol for summation, is known in Excel as **AutoSum**. Clicking it [A] automatically inserts the Sum function to add a range of cells. Clicking the **AutoSum** dropdown arrow [B] provides quick access to several key functions. AutoSums should be placed to the right and below data to be summed. **AutoSum** will not include in the summed total the values of cells located to the right or below the cell where it is located.

	A	B	C	D	E	F	G	H	
1	Company	FName	LName	Title	QTR 1	QTR 2	QTR 3	QTR 4	Total
2	J&J	Jaime	Swindell	Engineer	\$3,200.00	\$4,391.00	\$4,549.00	\$4,707.00	
3	Hi Labs	Mani	Russo	Manager	\$3,452.00	\$5,674.00	\$7,698.00	\$9,722.00	
4	Jet Propulsion	Vicki	Brannon	VP Sales	\$5,467.00	\$3,245.00	\$4,532.00	\$5,819.00	
5	Sun Systems	Jerry	Poe	Exec. Director	\$4,568.00	\$3,444.00	\$2,198.00	\$2,756.00	
6	Kellog	Lori Ann	Palisi	Sales Rep	\$9,830.00	\$4,829.00	\$3,202.00	\$2,003.00	
7	GM	Dave	Thomas	HR Director	\$1,256.00	\$2,356.00	\$4,555.00	\$5,603.00	
8	Walmart	Julie	Schnelker	Buyer	\$2,343.00	\$6,432.00	\$2,523.00	\$3,059.00	
9	Fort Knox	Scott	Foust	Commander	\$7,897.00	\$3,245.00	\$5,093.00	\$1,469.00	



Functions

Create a Summary Sheet:

In this example, we need to add all four quarters for each state:

	B	C	D	E	F	G
3	First Quarter Sales					
4		January	February	March	Total Sales	
5	California	\$1,345.00	\$2,345.00	\$4,567.00	\$8,257.00	
6	Florida	\$3,333.00	\$3,456.00	\$6,443.00	\$13,232.00	
7	Georgia	\$2,356.00	\$7,665.00	\$9,999.00	\$20,020.00	
8	Indiana	\$4,000.00	\$4,444.00	\$5,555.00	\$13,999.00	

	B	C	D	E
3	Year End Summary			
4	Grand Total Sales			
5	California			
6	Florida			
7	Georgia			
8	Indiana			
9				

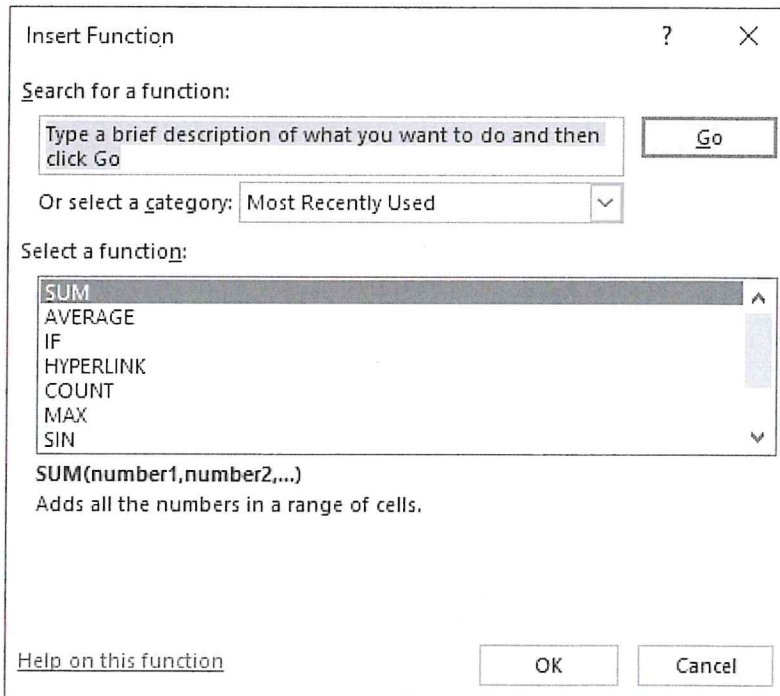
For California's total, we could write:

='First Quarter'!F5+'Second Quarter'!F5+'Third Quarter'!F5+'Fourth Quarter'!F5

Or, Using 3D Referencing, we get this: **=SUM('First Quarter:Fourth Quarter'!F5)**

Find More Functions:

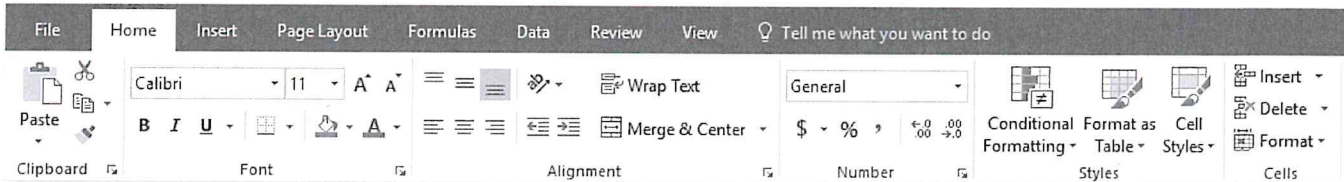
Excel contains over 300 different functions! Use **fx** on the formula bar to display the full list which is organized by category.





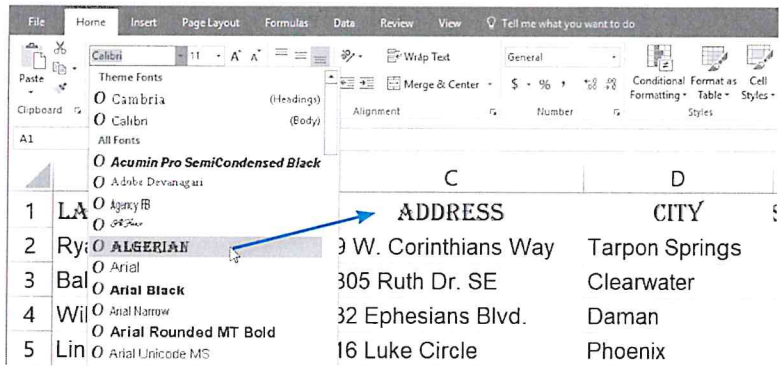
Make Your Data Look Polished

Once all data and formulas have been entered, it's time to make the worksheet "pop" with color and pizzazz. A clear, attractive, and professional-looking spreadsheet reflects well on the person who produced it. Many text editing options are available on the Home tab.



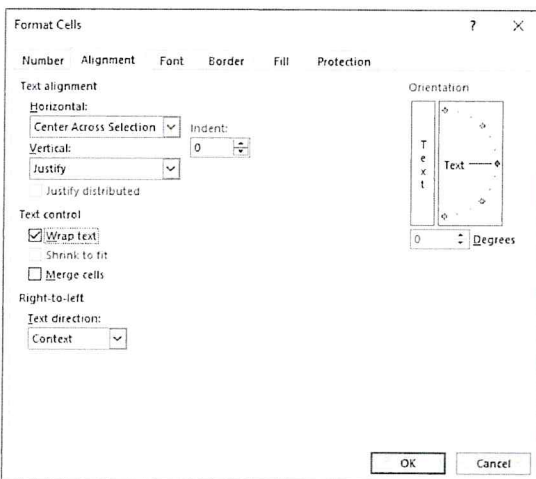
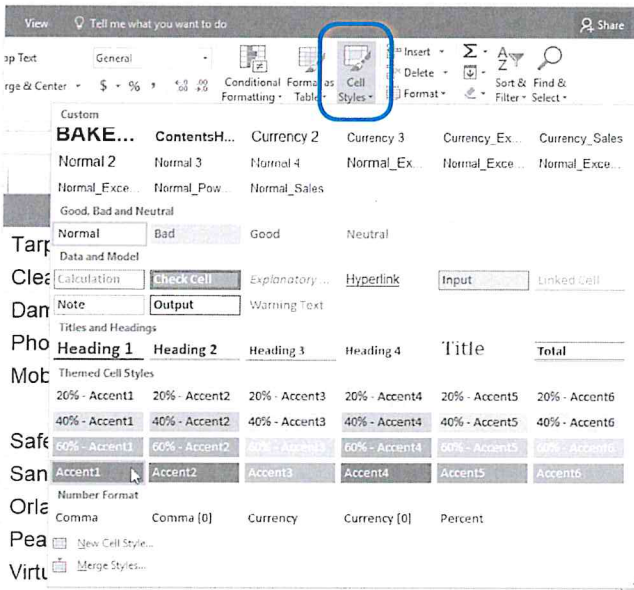
Live Preview enables you to see how a new font, font size, table style, or cell style would look on your selected data before you actually apply it.

Select your text and mouse over various formatting options in the Ribbon's menus. When you see the formatting you desire, just click the thumbnail to apply it.



Apply Cell Styles

Cell styles can save a lot of time when formatting. When it comes to options, there are many to choose from.



Use the **Dialog Box Launcher** for more options under each **Ribbon Group**. Excel's dialog boxes provide access to many useful options that are not available directly on the **Ribbon**.

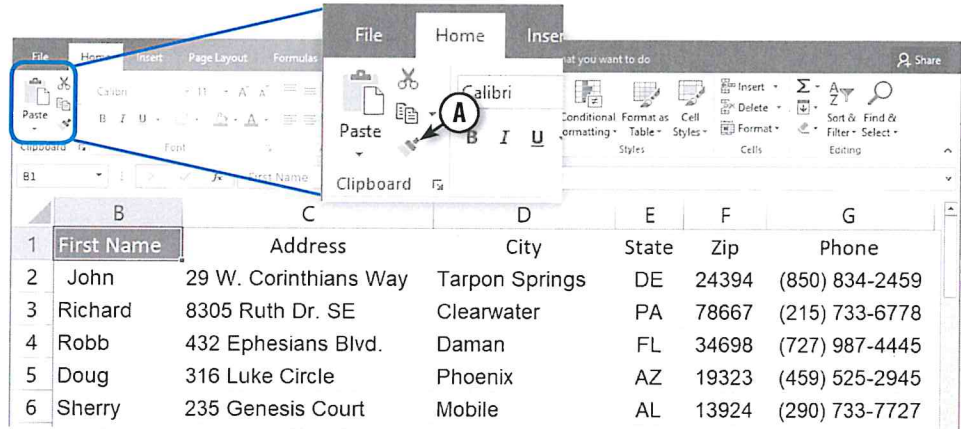


Copy and Paste Formats

Once a desired look has been achieved, it is easy to apply that same formatting to additional cells using a tool called the Format Painter.

Copy or paste formatting from one cell to another:

1. Select the cell with the formatting to be copied.
2. Click the **Format Painter** [A] button in the **Clipboard** group on the **Home** tab.
3. Select the cells to which the formatting should be applied.



Copy or paste formatting several times:

1. Select the cells with the formatting to be copied.
2. Double-click the **Format Painter** [A] button in the **Clipboard** group of the **Home** tab.
3. Select the cells to which the formatting should be applied.
4. Repeat as many times as necessary.
5. Deactivate the **Format Painter** by pressing the **ESC** on the keyboard or by clicking the **Format Painter** button again.

	B	C	D	E
1	First Name	Address	City	State
2	John	29 W. Corinthians Way	Tarpon Springs	DE
3	Richard	8305 Ruth Dr. SE	Clearwater	PA
4	Robb	432 Ephesians Blvd.	Daman	FL
5	Doug	316 Luke Circle	Phoenix	AZ
6	Sherry	235 Genesis Court	Mobile	AL



In 2007, Microsoft Office introduced the ultimate formatting feature called **Themes**. Use Themes to create consistent document designs across all Office products.



Organize and Display Data

There are various ways to organize and display data. The better organized it is, the more useful it will be to the people who use it. Data formatted as a list are easy to read and understand, making that formatting choice ideal for reports.

Seven Habits of Effective Lists:

1. Always create a Header Row.
2. Format the header row so it is easily distinguishable from the rest of the data.
3. Always build the list from top to bottom, not from left to right.
4. Do not include any entirely blank rows or columns in the data.
5. Use formatting to highlight portions of the data.
6. Do not merge cells within the list.
7. Be consistent – always use Delaware or always use DE, not a mix of the two.

Circle all of the things that need to be changed to correct this example:

	A	B	C	D	E	F	G
1	Ryan	John	29 W. Corinthians Way	Tarpon Springs	Delaware	24394	913-834-2459
2	Ballard	Richard	8305 Ruth Dr. SE	Clearwater	PA	78667	(215) 733-6778
3	Wilmot	Robb	432 Ephesians Blvd.	Daman	FL	34698	(727) 987-4445
4	Lindt	Doug	316 Luke Circle	Phoenix	AZ	19323	(459) 525-2945
5	Prindle	Sherry	235 Genesis Court	Mobile	AL	13924	(290) 733-7727
6	Vickers	Mark	112 Matthew Rd.	Safety Harbor	LA	46688	(395) 785-6667
7							
8	Perkins	Joe	349 W. Sampson St.	San Francisco	CA	43733	(656) 545-2345
9	Muhammad	Rodney	7 Kings Hwy.	Orlando	FL	34688	(843) 734-9995
10	Karklins	Maris	443 Titus Ave.	Pearly Gates	OH	56932	(909) 334-8721
11	Rock	Chris	31 Proverbs Place	Virtuous Bay	MA	09732	(507) 288-3235

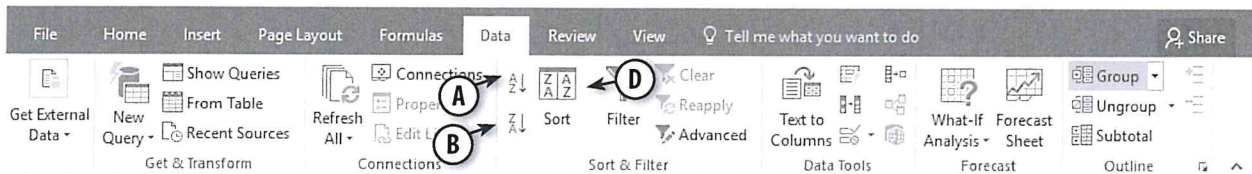


Sort Data

Excel offers several ways to sort data alphabetically, chronologically, or numerically. The three most common are listed below.

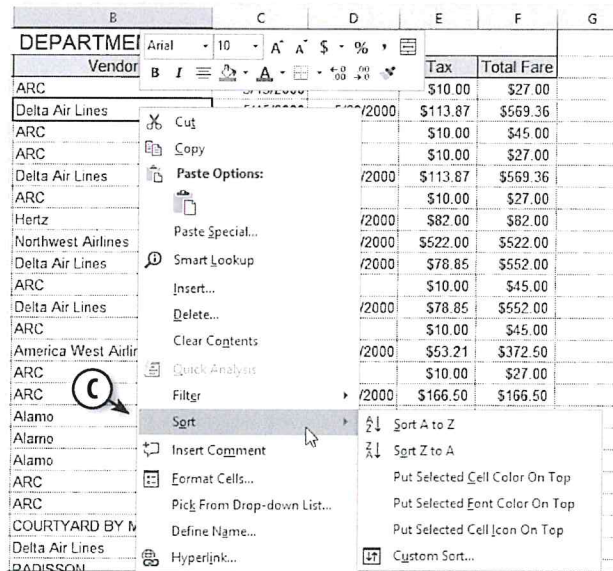
Method One:

1. Click a cell in the column by which the data should be sorted.
2. Click the **A-Z [A]** or the **Z-A [B]** button in the **Sort & Filter** group on the **Data** tab of the **Ribbon**.



Method Two:

1. Right-click any cell in the column by which the data should be sorted.
2. Select **Sort [C]**.
3. Select a sort method.



Method Three (Safest):

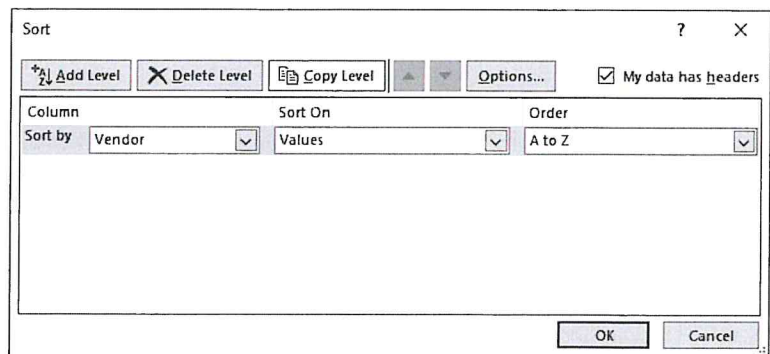
1. Click anywhere in the data to be sorted.
2. Click the big **Sort** button [D] in the **Sort & Filter** group on the **Data** tab of the **Ribbon**. The Sort dialog window will open.



Some sort methods allow you to sort a column by itself.



Develop the habit of always saving at least two copies of your very important files just in case one copy gets destroyed by incorrect sorting, random corruption, or gets misplaced.





Hide Data

It is possible to hide data in a worksheet to simplify viewing, select a subset of data for printing, or to prevent unauthorized users from seeing particular information.

Hide columns:

1. Select the columns to be hidden.
2. Right-click the selection.
3. Select **Hide [A]** from the menu.

	A	B	C	D	E	F	G
1	Last Name	First Name	Annual Salary	Email	Street Address	City	State
2	Brown	Angela	\$ 47,000.		Rd	Overland Park	KS
3	Douglas	Serena	\$ 52,000.		e	Leawood	KS
4	Smith	James	\$ 35,000.		sia way	Olathe	KS
5	Wilson	Andy	\$ 67,000.00	awilson@biz.com	307 NE 2nd St	Leawood	KS
6	Franklin	Edna	\$ 52,000.		3200 Texas Hill Rd.	Raymore	MO
7	Rory	Hawkins	\$ 33,000.		3623 W. 76st	Independence	MO
8	Johnson	Kim	\$ 45,000.		601 W.		
9	Quinn	Aidan	\$ 52,000.		6092 E		
10	Berry	Andy	\$ 28,000.		6230 V		
11	Crocker	Becky	\$ 33,000.		684 Fo		
12	Rose	Amy	\$ 52,000.		7419 T		
13	Kirby	Bill	\$ 75,000.		944 W		
14	Russell	Ann	\$ 32,000.		967 Pe		

	A	B	D	E	F	G
1	Last Name	First Name	Email	Street Address	City	State
2	Brown	Angela	abrown@biz.com	109 Avington Rd	Overland Park	KS
3	Douglas	Serena			Leawood	KS
4	Smith	James		way	Olathe	KS
5	Wilson	Andy	awilson@biz.com	307 NE 2nd St	Leawood	KS
6	Franklin	Edna		200 Texas Hill Rd.	Raymore	MO
7	Rory	Hawkins		623 W. 76st	Independence	MO
8	Johnson	Kim		01 W. 66th Terr	Independence	MO
9	Quinn	Aidan		092 E 109th St. N.	Leawood	KS
10	Berry	Andy		230 Valley Rd	Independence	MO
11	Crocker	Becky		84 Fox Court East #B	Overland Park	KS
12	Rose	Amy		419		
13	Kirby	Bill		44 \		
14	Russell	Ann		67		

Unhide columns:

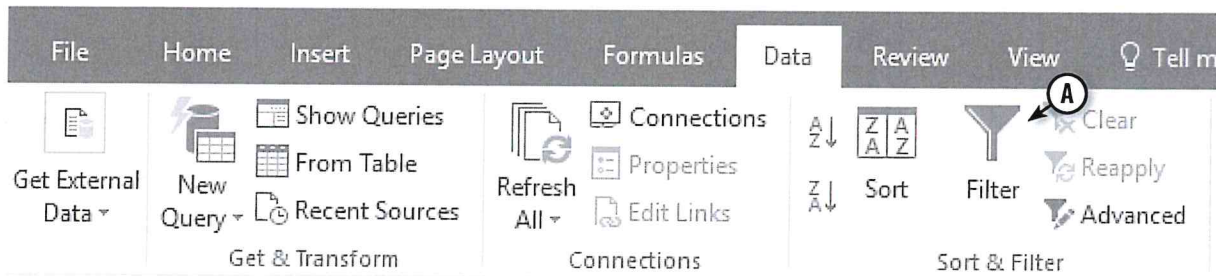
1. Select the columns before and after the ones which are hidden.
2. Right-click and select **Unhide [B]** from the menu.



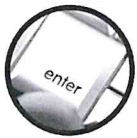
Filter Data

AutoFilter:

1. Click any cell in the data.
2. Click the **Filter [A]** button in the **Sort & Filter** group on the **Data** tab of the **Ribbon**.
3. Click the dropdown button at the top of the column to be filtered.
4. Choose a sort button [**B**] (**A-Z, Z-A**) or uncheck all but the desired entries from the **Filters** window [**C**]. (Uncheck **Select All** to clear all checks.)
5. Click the **OK** button.



	A	B	C	D	E	F
1	DEPARTMENT TRAVEL EXPENSES					
2	Passenger Name	Vendor	Depart	Return	Tax	Total Fa
3	Adam, Jim		5/15/2016		\$10.00	\$27.00
4	Adams, Donn		5/15/2016	5/20/2016	\$113.87	\$569.36
5	Adams, Jim		1/27/2016		\$10.00	\$45.00
6	Adams, Jim		5/15/2016		\$10.00	\$27.00
7	Adams, Jim		5/15/2016	5/20/2016	\$113.87	\$569.36
8	Atkins, Ron		2/23/2016		\$10.00	\$27.00
9	Atkins, Ron		2/23/2016	2/24/2016	\$82.00	\$82.00
10	Barker, Bob		2/23/2016	2/24/2016	\$522.00	\$522.00
11	Campbell, Me		5/12/2016	5/19/2016	\$78.85	\$552.00
12	Carrey, Barry		5/12/2016		\$10.00	\$45.00
13	Carrey, Barry		5/12/2016	5/19/2016	\$78.85	\$552.00
14	Carrey, Pam		5/12/2016		\$10.00	\$45.00
15	Chile, Juan		5/11/2016	5/18/2016	\$53.21	\$372.50
16	Chile, Juan		5/11/2016		\$10.00	\$27.00
17	Conelly, Doug		3/6/2016	3/7/2016	\$51.00	\$51.00
18	Conelly, Doug		3/6/2016		\$10.00	\$27.00
19	Conelly, Doug		3/6/2016	3/7/2016	\$75.00	\$75.00
20	Conelly, Doug		3/6/2016	3/6/2016	\$253.00	\$253.00
21	Conelly, Doug		3/7/2016	3/8/2016	\$88.00	\$88.00
22	Conelly, Doug		3/7/2016	3/8/2016	\$79.00	\$79.00
23	Conelly, Doug	USAir	3/7/2016	3/7/2016	\$148.50	\$148.50
24	Conelly, Doug	ARC	3/8/2016	3/8/2016	\$166.50	\$166.50



Create Charts

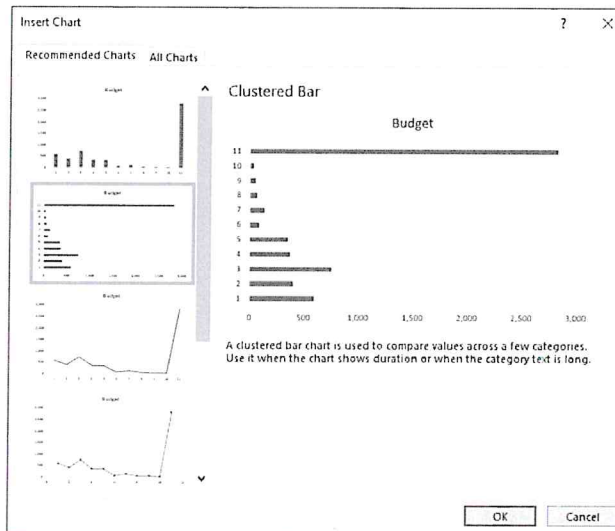
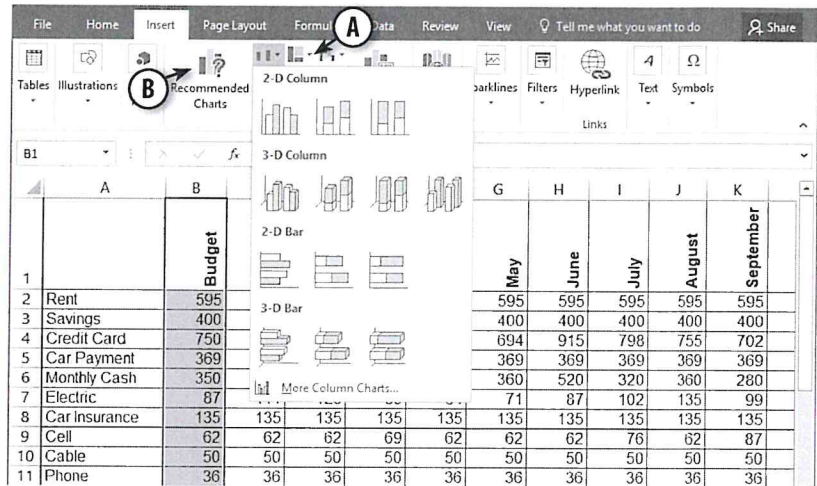
Sometimes data is better expressed visually than by the numbers themselves. In those cases, use a chart or a graph.

Create a chart:

1. Select the cells which contain the data to be charted.
2. Click the **Insert** tab.
3. Click the dropdown arrow for the desired chart type and then select a sub-type [A].

OR

Click **Recommended Charts** [B] to open the **Insert Chart** dialog box for recommendations or a list of all charts available in your version. (Excel 2013 and later).



After you select your data, click the **Quick Analysis** tool [C] to quickly choose from Excel's chart recommendations or open the **Insert Chart** dialog box. (Excel 2013 and later)

	A	B	C	D	E	F	G
9	Cell	62	62	62	69	62	62
10	Cable	50	50	50	50	50	50
11	Phone	36	36	36	36	36	36
12	Expense Total	2,834	722	2,994	2,786	2,676	2,772
13							

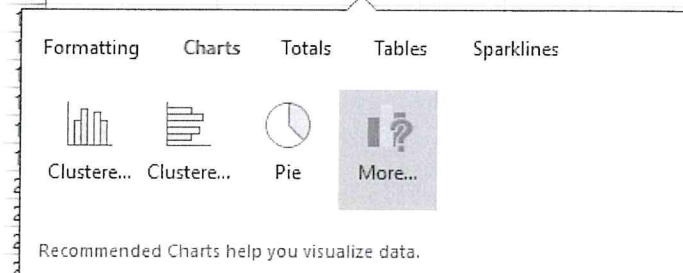




Chart Types and Terminology

Chart Types

Column	Radar
Line	Treemap
Pie	Sunburst
Bar	Histogram
Area	Box & Whisker
XY (scatter)	Waterfall
Stock	Funnel
Surface	Combo

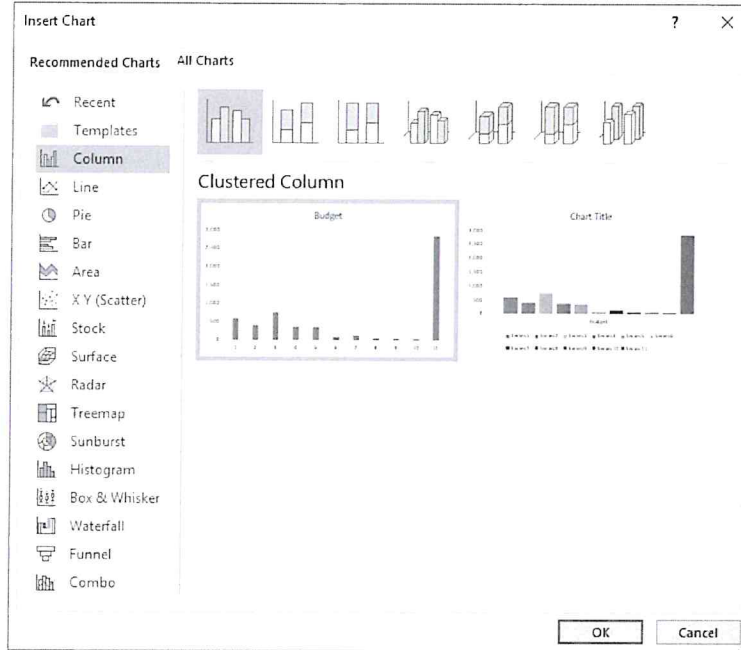


Chart Terminology

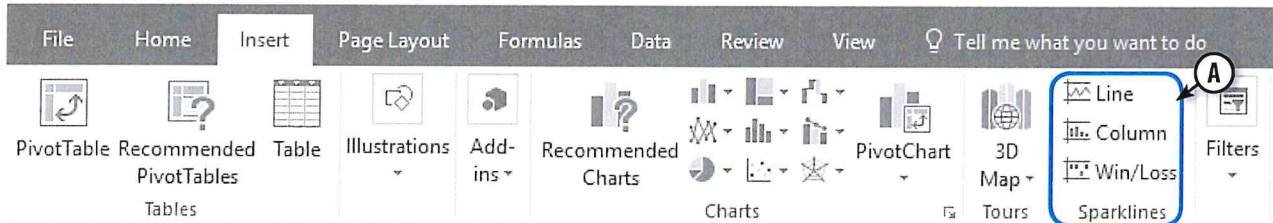


A. Chart Title	C. Data Labels	E. Data Table
B. Legend	D. Horizontal Axis Title	F. Vertical Axis Title



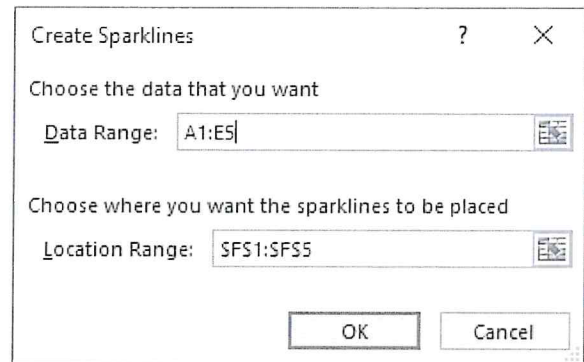
Sparklines

Sparklines are miniature charts contained in a single cell. These micro-charts help visually analyze single data sets. (Excel 2010 and later)



Insert a Sparkline into your workbook:

1. Select the data range you wish to chart.
2. Click the **Insert** tab.
3. Under the **Sparklines** section [A], select **Line**, **Column**, or **Win/Loss** to open the **Create Sparklines** dialog box. The range you selected will already be filled in the **Data Range** field.
4. Click on the cell(s) where you want the Sparkline to appear and click **OK**.



Line

	A	B	C	D	E	F	G
1	6.00%	7.00%	10.00%	-8.00%	4.00%		
2	-8.00%	5.00%	-76.00%	25.00%	78.00%		
3	6.00%	10.00%	25.00%	-21.00%	18.00%		
4	34.00%	12.00%	-4.00%	90.00%	32.00%		
5	5.00%	-2.00%	4.00%	-3.00%	1.00%		
6							

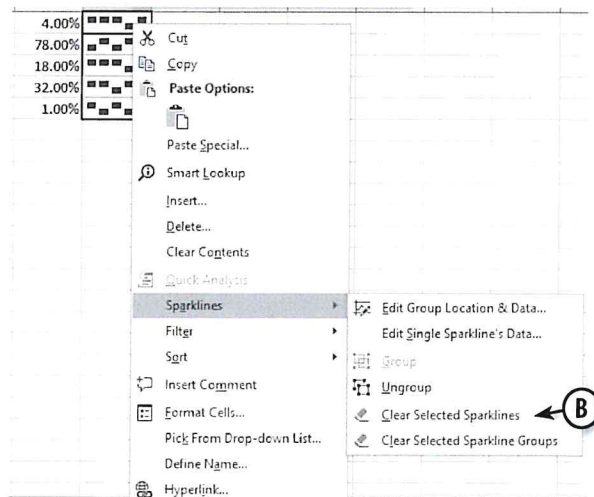
Column

	A	B	C	D	E	F	G
1	6.00%	7.00%	10.00%	-8.00%	4.00%		
2	-8.00%	5.00%	-76.00%	25.00%	78.00%		
3	6.00%	10.00%	25.00%	-21.00%	18.00%		
4	34.00%	12.00%	-4.00%	90.00%	32.00%		
5	5.00%	-2.00%	4.00%	-3.00%	1.00%		
6							

Win/Loss

	A	B	C	D	E	F	G
1	6.00%	7.00%	10.00%	-8.00%	4.00%		
2	-8.00%	5.00%	-76.00%	25.00%	78.00%		
3	6.00%	10.00%	25.00%	-21.00%	18.00%		
4	34.00%	12.00%	-4.00%	90.00%	32.00%		
5	5.00%	-2.00%	4.00%	-3.00%	1.00%		
6							

To remove a Sparkline, right-click the cell that contains a sparkline, select **Sparklines**, then select **Clear Selected Sparklines** [B].





Notes

Lined area for taking notes.



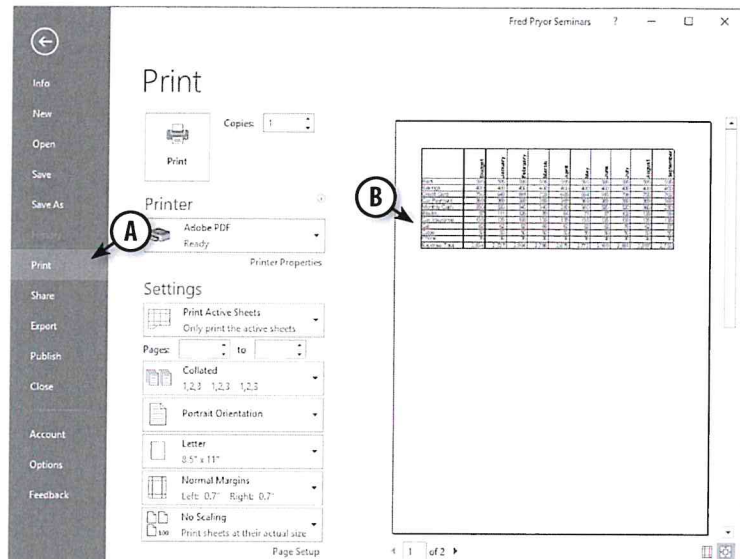
Print

There is nothing more frustrating than to work on a spreadsheet for a whole week, to format everything so it looks perfect on the screen, only have it print incorrectly. There are several common printer errors that Excel users encounter:

- Sheets that stretch across more pages than intended
- Blank pages between missing pages
- Missing data
- “Orphaned” rows and columns
- Absent row headers or column labels on subsequent pages
- Missing or incorrect header/footer information

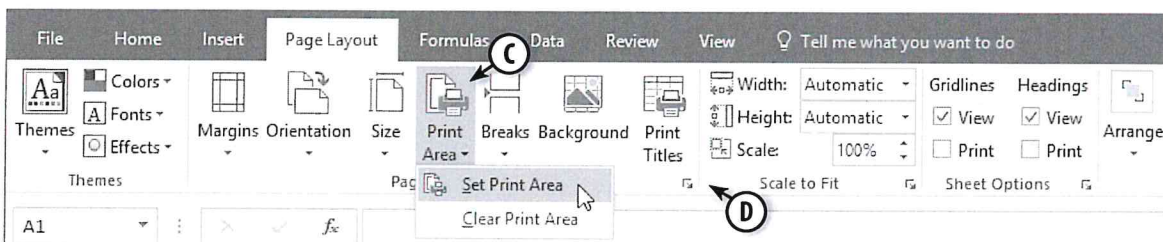
Preview before Printing:

1. Click the **File** tab.
2. Click the **Print** menu option [A].
3. Review the document in the **Print Preview Pane** [B].
4. Click the back arrow to return to the document, or print directly from this view.



Set the Print Area:

1. Select the cells to be printed.
2. On the **Page Layout** tab, in the **Page Setup** group, click the **Print Area** button [C].
3. Select **Set Print Area**.



Make Other Adjustments:

- Adjust the **Margins**.
- Change page **Orientation**.
- Adjust page **Breaks**.



The Page Setup Dialog

Click the **Page Setup** group dialog box launcher [D page 29] for more options:

The Page Tab: Controls on this tab govern page orientation and scaling.

Orientation determines whether a page prints as **Portrait** or **Landscape**.

- Use **Portrait** for sheets that have more rows than columns.
- Use **Landscape** for sheets with more columns than rows.

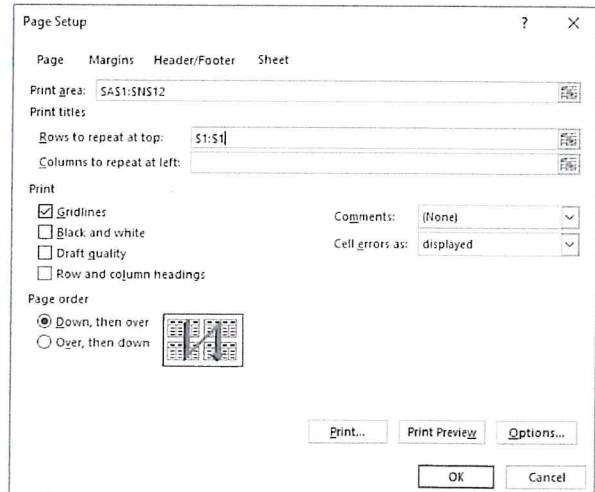
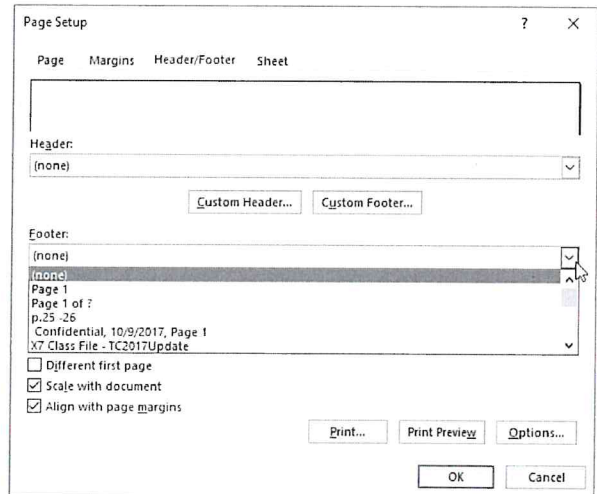
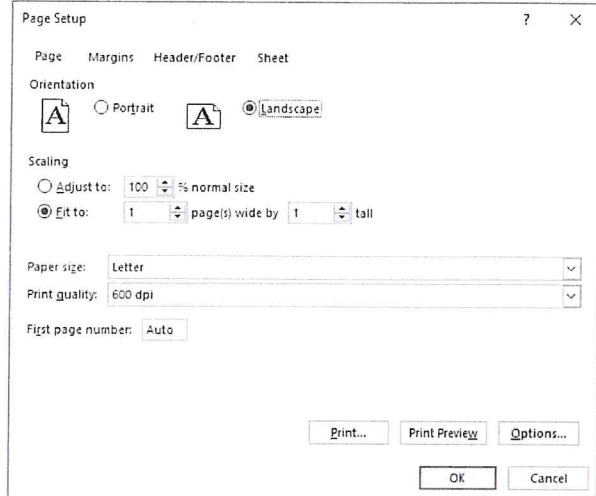
Use page **Scaling** to adjust a worksheet that is a little too long or wide to fit to a single page either horizontally or vertically.

- The **Adjust Function:** These settings convert the page to a percentage of its original size.
- The **Fit to Function:** These settings fit the printed document to X pages wide by Y pages tall.

The Header/Footer Tab:

These functions control the inclusion of the date, a company name, and any other information at the top or bottom of each page.

Clicking the dropdown arrow in the **Header** or **Footer** option boxes will reveal suggestions. If none of the suggested options are appropriate, click **Custom Header** or **Custom Footer**.



The Sheet Tab:

The features on this tab are exceptionally helpful when printing lists, as they configure header rows to print on every page. Use the Rows to repeat at top section to enable this formatting. Turn on the printing of **Gridlines**, **Row and column headings**, **Comments**, and **Cell errors** as using the checkboxes in the **Print** section of the tab.



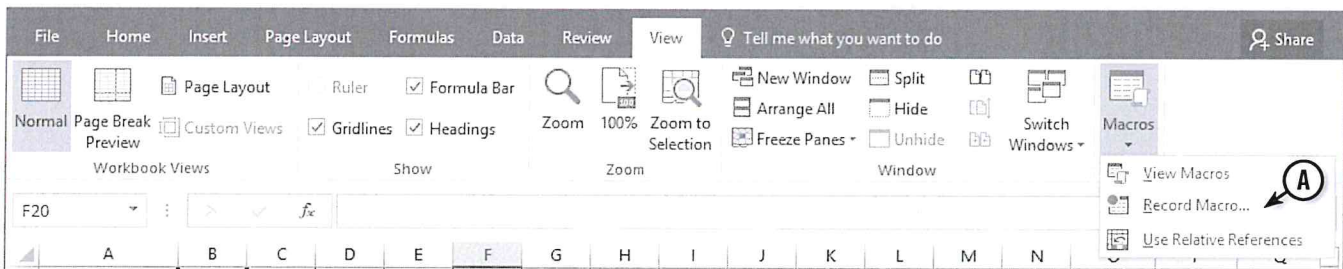
Macros

What is a Macro?

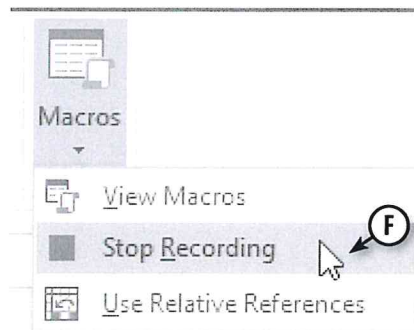
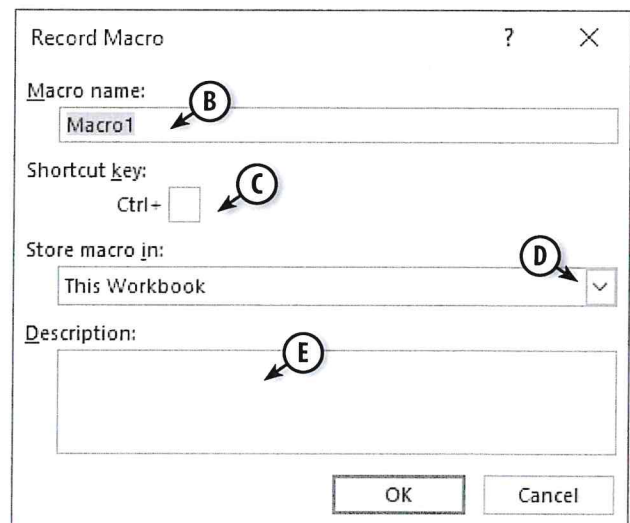
A macro is a recording of commands - keystrokes and mouse clicks - that can be played back at any time. Any repetitive set of tasks that are performed exactly the same way every time is a good candidate for becoming a macro. For example, if the same report is generated weekly and must be printed using the same layout and settings each time, recording those steps as a macro will speed up the process and minimize errors.

Create a Macro:

1. On the **View** tab, in the **Macros** group, click the **Macros** dropdown arrow and select **Record Macro [A]**.



2. In the **Macro name field [B]**, provide a descriptive name for the macro.
3. Assign a **Shortcut key** to the macro [C].
4. Click the **OK** button.
5. Designate where the macro should be stored in the **Store macro in** dropdown [D].
6. Provide a brief description and a date in the **Description** box [E].
7. Click the **OK** button.
8. Perform the commands to be included in the macro.
9. On the **View** tab, in the **Macros** group, click the **Macros** dropdown arrow and select **Stop Recording [F]**.





Appendix

Unassigned Keystrokes

The following keystroke combinations are not assigned to any default functions by Microsoft in Excel. That makes them good choices when assigning keystrokes to your macros.

Ctrl Commands	Alt Commands	Ctrl + Shift Commands
CTRL + j	Alt + c	Ctrl + Shift + c
CTRL + m	Alt + d	Ctrl + Shift + d
CTRL + q	Alt + e	Ctrl + Shift + e
	Alt + g	Ctrl + Shift + g
	Alt + h	Ctrl + Shift + h
	Alt + i	Ctrl + Shift + i
	Alt + j	Ctrl + Shift + j
	Alt + k	Ctrl + Shift + k
	Alt + m	Ctrl + Shift + m
	Alt + n	Ctrl + Shift + n
	Alt + r	Ctrl + Shift + q
	Alt + s	Ctrl + Shift + r
	Alt + v	Ctrl + Shift + s
	Alt + w	Ctrl + Shift + v
	Alt + x	Ctrl + Shift + w
	Alt + y	Ctrl + Shift + x
	Alt + z	Ctrl + Shift + y
		Ctrl + Shift + z



Appendix

Compatibility Between Excel Versions

Most, but not all, of Excel's features are backwards compatible from Excel 2007-2016/365. As a rule of thumb, you can generally open files saved in older versions of Excel with newer versions, but you might not be able to use newer files in older versions.

New features (such as new functions and charts) in particular may give you problems if you try to open them in older versions such as this one to the right.

Files created in a version of Excel older than 2007 may need to go through the following conversion process.

1. Click the **File** tab.
2. Select **Convert [A]** from the **Info** menu option. (The **Convert** option will only be visible if the file was created and saved in a version of Excel older than 2007.)
3. Click **OK** to accept the warning about converting workbooks, if it appears.
4. Browse to the location you wish to save the converted file, type a file name, and click **Save**.

Or, you can also use **Save As** and choose Excel Workbook (*.xlsx) from the file type dropdown menu.

To save a workbook as a pre-2007 version, use the **Save As** option and select **Excel 97-2003 Workbook (*.xls)** from the file type dropdown menu. A dialog box will pop up with information about what will be lost.



If you convert a workbook to another version (in either direction), it will no longer be available in the original file format. Make sure to keep a copy of the workbook in the original file format as a backup.

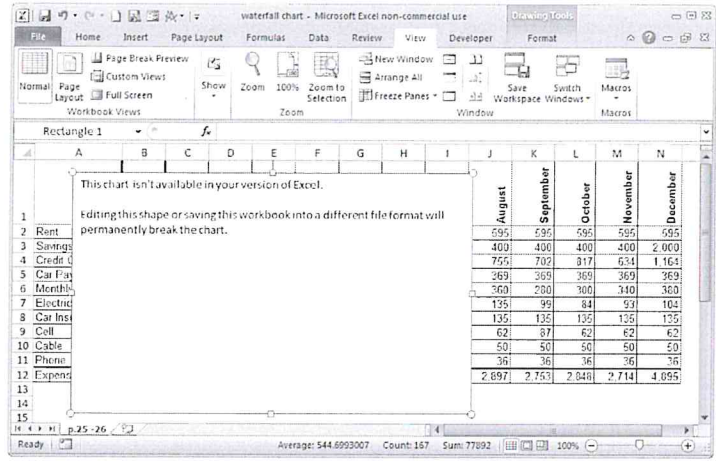
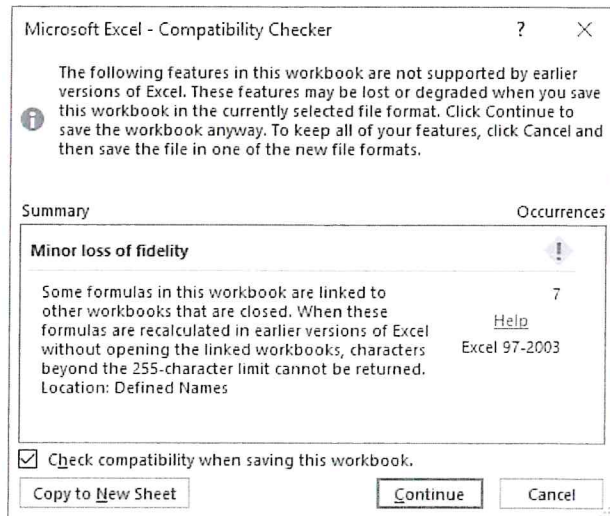
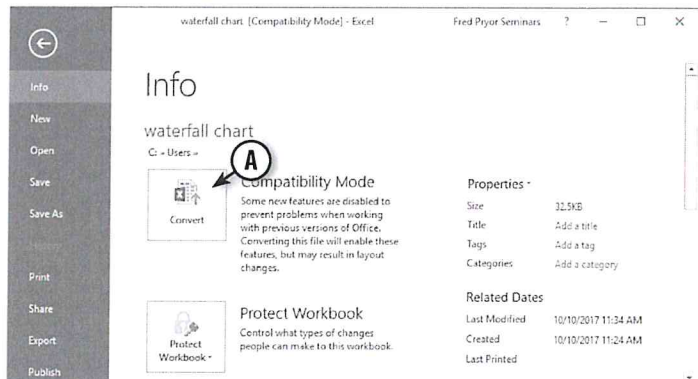


Chart created in Excel 2016 when opened in Excel 2010



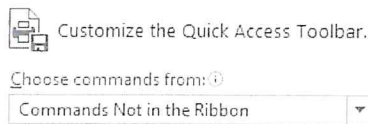


Appendix

Data Forms

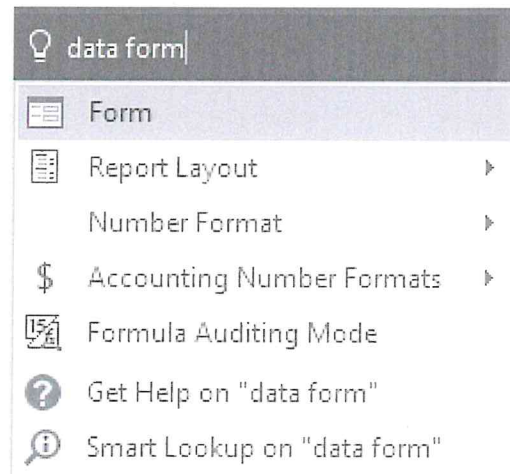
Data forms are a useful way to find and enter records into a database that is very long or very wide. The Data Form button, however, is not included in Excel's default Ribbon. You can access it in one of two ways:

1. Add the command to the Quick Access Toolbar (See Also: *Customize the Excel Environment*). The command is located under **"Commands Not in the Ribbon"** dropdown menu of Excel Options.



Once the command appears in the QAT, select the range you wish to search or expand, then click the **Form** command button.

2. **Windows Excel 2016/365 Only:** Select the range you wish to search or expand, then type "Data Form" into the **Tell me what you want to do** searchbox, then select **Form** from the results menu.



Use the Data Form

- Type in any field to update the record. (Click **Restore** to erase your changes.)
- **Find Prev** or **Find Next** to advance through the records in your sheet.
- Click **New** to enter a new record into your sheet.
- Click **Criteria** to enter search terms for specific records you want to find.

Employee Info (2)		?	×
Employee Number:	100054	^	1 of 13
LastName:	Brown		New
FirstName:	Angela		Delete
Benefits:	Self		Restore
Hire Date:	3/6/2009		Find Prev
Annual Salary:	47000		Find Next
Department:	Accounting		Criteria
			Close



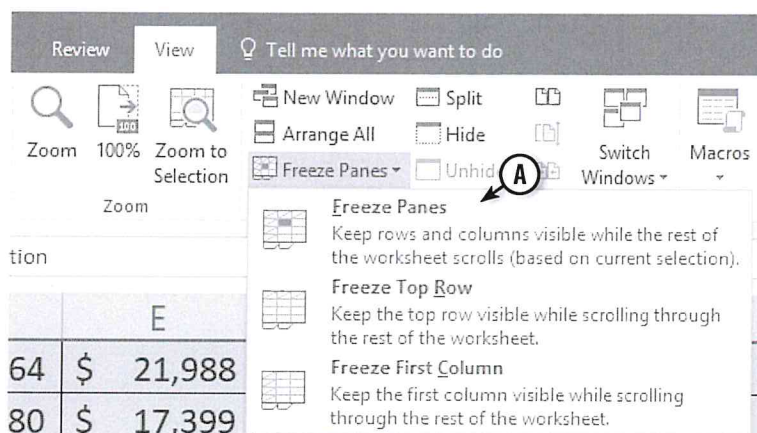
Appendix

Freeze Panes

Freeze panes:

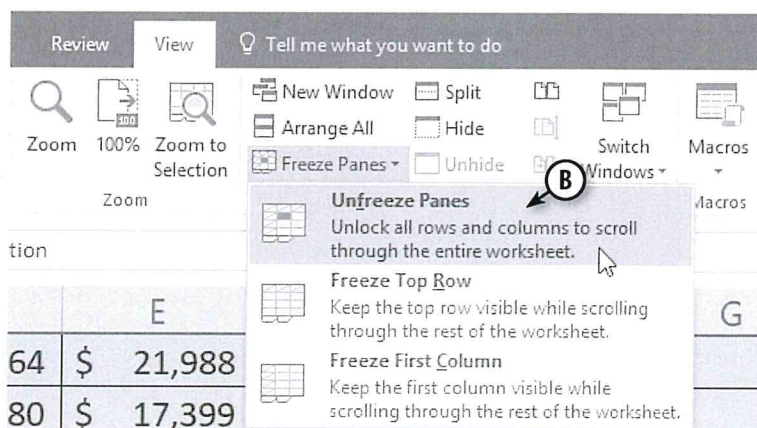
1. Click in the cell beneath the row and/or to the right of the column to be frozen.
2. On the **View** tab, in the **Window** group, click the **Freeze Panes** dropdown arrow and select **Freeze Panes [A]**.

Hint! For a quick way to freeze just the top row or just the leftmost column, choose **Freeze Top Row** or **Freeze First Column** from the **Freeze Panes** dropdown menu.



Unfreeze panes:

1. Click in the cell beneath the row and/or to the right of the column to be frozen.
2. On the **View** tab, in the **Window** group, click the **Freeze Panes** dropdown arrow and select **Unfreeze Panes [B]**.



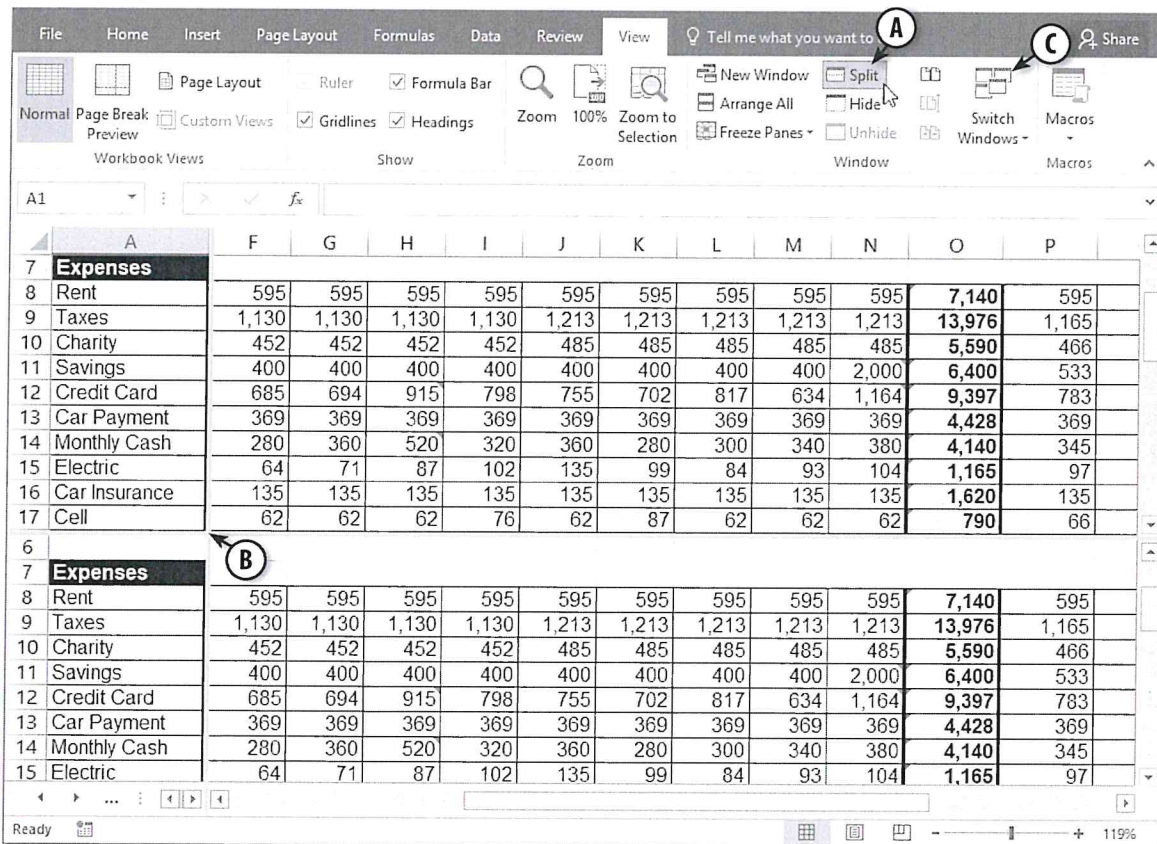


Appendix

Split Workbooks

Split a workbook into two windows:

1. On the **View** tab, in the **Window** group, click the **Split** button [A].
2. Click and drag the divider [B] to the appropriate position.
3. Click the **Split** button again to remove the split.



Use the **View Side by Side [C]** button to compare two spreadsheets.

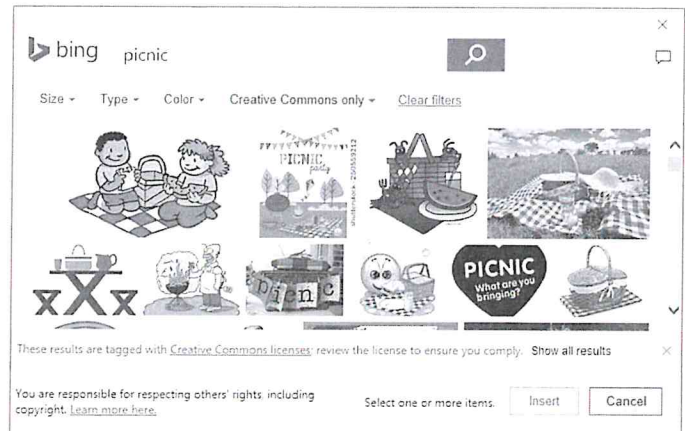
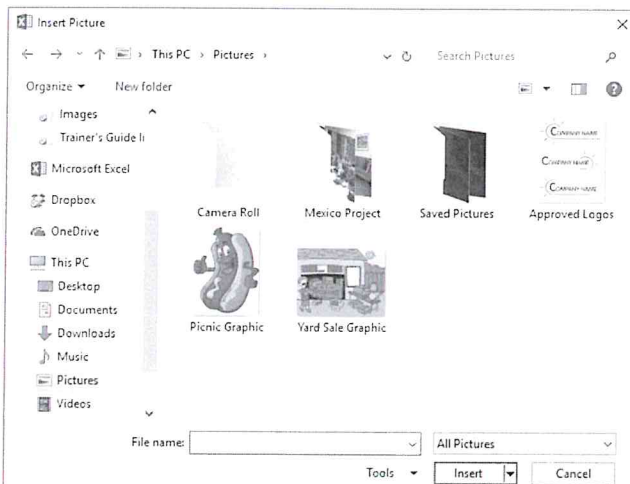
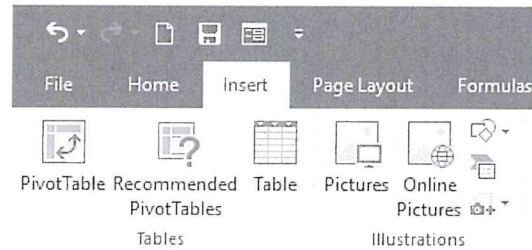


Appendix

Add Pictures, Clip Art, and Shapes

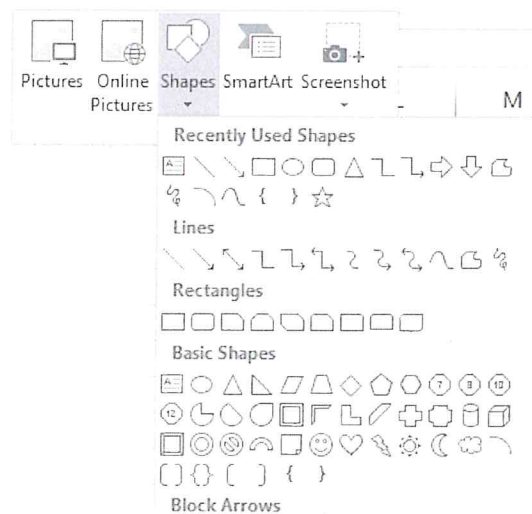
Add a picture:

1. Click the **Insert** tab.
2. Choose an option from the **Illustrations** group:
 - a. Click **Pictures** to find images located on your local hard drive.
 - b. Click **Online Pictures** to locate an image using Bing Image Search.
3. Find and select a picture.
4. Click the **Insert** button.



Add a shape:

1. Click the **Insert** tab.
2. Click the **Shapes** dropdown arrow in the Illustrations group.
3. Select a shape.
4. Click and drag to position it in your sheet.



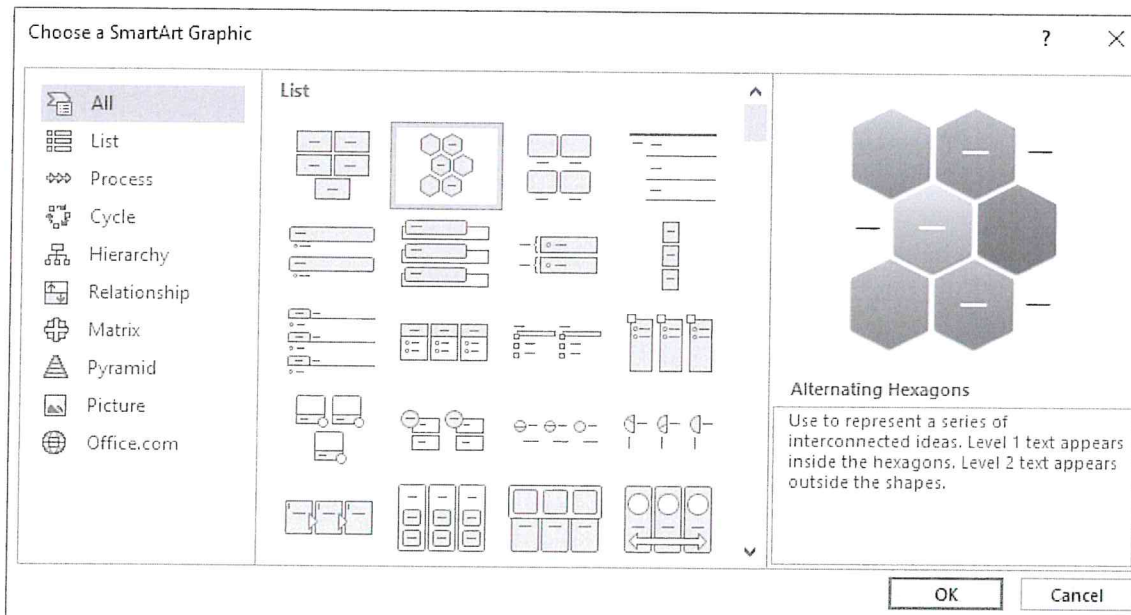
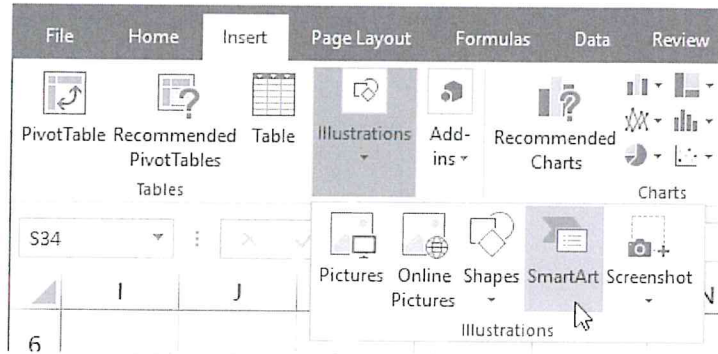


Appendix

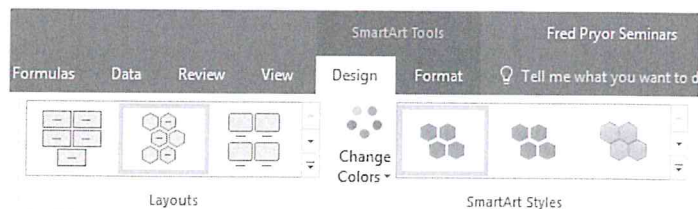
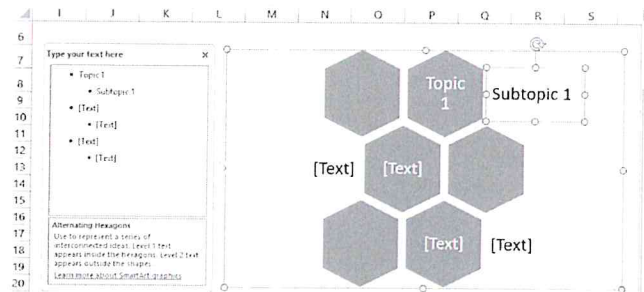
Add SmartArt

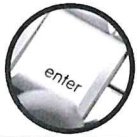
Add a SmartArt diagram:

1. Click the **Insert** tab.
2. Click the **SmartArt** button in the **Illustrations** group.
3. Select a diagram type and style.
4. Click **OK**.



Use the **Text Pane** to enter your text. Use the **Design** and **Format** tabs to modify the diagram.





Appendix



Group Data

To group your data:

1. Select the rows you want to group under another row. In this example, the passengers using Alamo are going to be grouped under Alamo.
2. Click the **Data** tab.
3. Click the **Group** button [A].
4. Repeat for additional groups.

DEPARTMENT TRAVEL EXPENSES						
Vendor	Passenger Name	Depart	Return	Tax	Total Fare	
AirTran Airways, Inc.	SPEER, STEPHEN	2/24/2016		\$403.00	\$403.00	
Alamo						
Alamo	Conelly, Doug	3/6/2016	3/7/2016	\$51.00	\$51.00	
Alamo	Conelly, Doug	3/7/2016	3/8/2016	\$88.00	\$88.00	
Alamo	Conelly, Doug	4/17/2016	4/20/2016	\$48.39	\$145.17	
Alamo	Granowicz, Paula	1/27/2016		\$10.00	\$27.00	
Alamo	Hambleton, Rob	2/24/2016	2/24/2016	\$41.00	\$41.00	
Alamo	Hill, Vicki	2/27/2016	3/3/2016	\$15.00	\$75.00	
Alamo	Hill, Vicki	3/27/2016	3/31/2016	\$42.23	\$168.92	
Alamo	Roberts, Desmond	2/23/2016	3/1/2016	\$26.74	\$187.19	
Alamo	Rocks, Julie	2/17/2016	2/17/2016	\$415.50	\$415.50	
America West Airlines						
America West Airlines	Chile, Juan	5/11/2016	5/18/2016	\$53.21	\$372.50	
America West Airlines	Dulla, Katie	5/16/2016	5/19/2016	\$123.06	\$369.19	



Click the **Collapse** or **Expand** buttons to get a high-level or a detailed view of your data.

DEPARTMENT TRAVEL EXPENSES						
Vendor	Passenger Name	Depart	Return	Tax	Total Fare	
AirTran Airways, Inc.	SPEER, STEPHEN	2/24/2016		\$403.00	\$403.00	
Alamo						
+	14 America West Airlines					
+	41 ARC					
+	166 Budget	Newell, Patricia	1/27/2016	1/30/2016	\$24.99	\$74.97
	167 Continental Airlines					
+	182 COURTYARD BY MARRIOTT	Conelly, Doug	3/6/2016	3/7/2016	\$75.00	\$75.00
	183 Delta Air Lines	Adams, Donna	5/15/2016	5/20/2016	\$113.87	\$569.36



Appendix

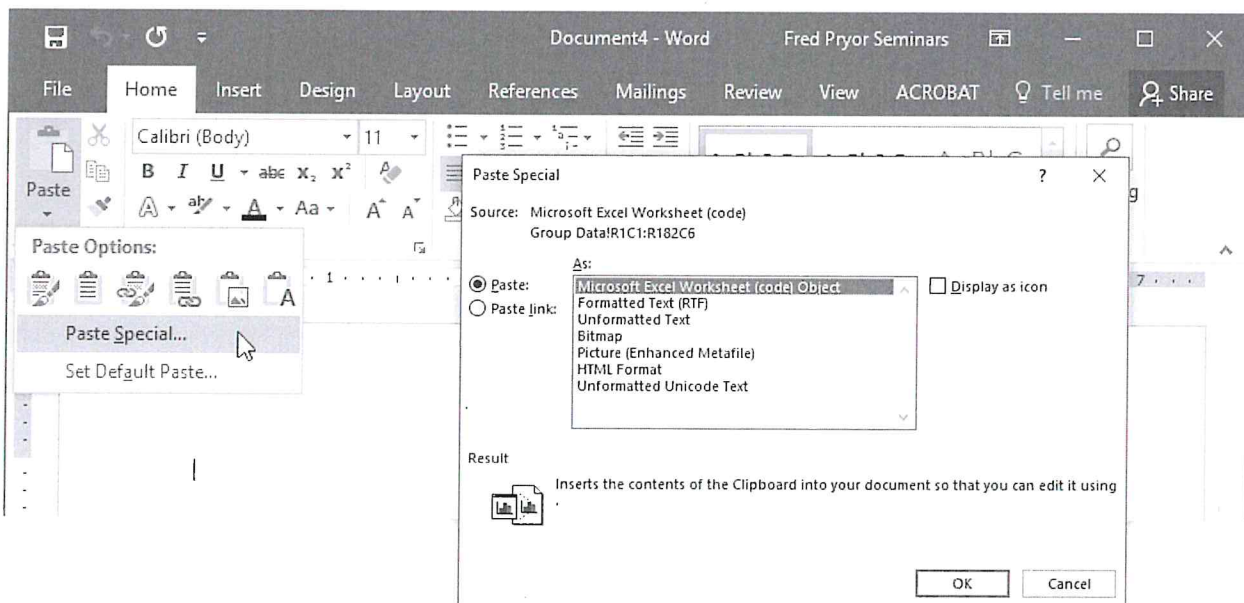
Embedding Excel Spreadsheets into Word or PowerPoint

In Excel:

1. Select the cells you want to be copied.
2. Click the **Copy** button.

In Word or PowerPoint:

1. Click in the document where the selected cells should be inserted.
2. Click the **Paste** dropdown arrow.
3. Select **Paste Special**.
4. Select **Microsoft Office Excel Worksheet Object**.
5. Choose **Paste** or **Paste link**.
6. Click **OK**.



Follow the same basic procedure for working with a chart. Just select **Microsoft Office Excel Chart Object** in the dialog box in Word, or **Microsoft Office Graphic Object** in PowerPoint.



Appendix

If you have used the computer for any longer than one day, you've certainly been stuck before. There is **nothing** more **frustrating** than to not know how to do something! Fortunately, there are different ways to get **HELP!**

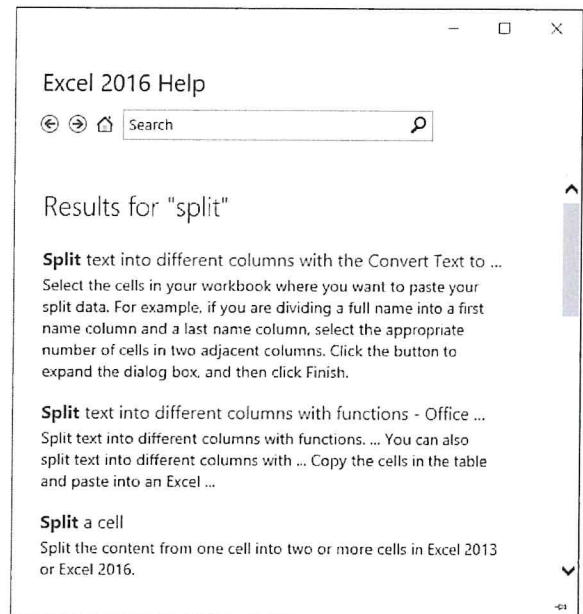
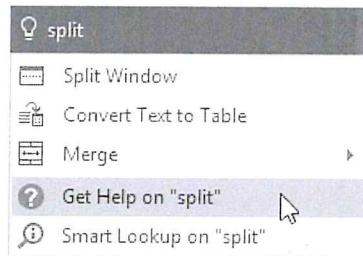
Use Microsoft Help:

Excel 2007-2013

1. Click the **Help** button.
2. Type a topic in the **Search** field.

Excel 2016/365

1. Type a topic in the **Tell me what you want to do** search field.
2. Choose a result or click **Get Help on "keyword"** to open the Help dialog.



Your ultimate goal is to work smarter and **NOT** harder!



Appendix

Books

QuickClicks: Excel by CareerTrack

Illustrated reference guides that answer your spreadsheet questions and walk you through every click.

QuickClicks: Excel 2007

QuickClicks: Excel 2010*

QuickClicks: Excel 2013*

QuickClicks: Excel 2016*

*Also in Downloadable eBook format!

QuickClicks Office Reference Guides by CareerTrack

Illustrated reference guides for Excel, Microsoft Access, Word, PowerPoint and Outlook. Sold individually and in bundles.

QuickClicks Office 2010 Collection

QuickClicks Office 2013 5 Pack

QuickClicks Office 2016 5 Pack

CD-ROMs

Unlocking the Secrets of Microsoft Excel by CareerTrack

A unique "show-me, try-me" approach provides interactive practices that allow you the opportunity to experience new skills in a safe learning environment.

Unlocking the Secrets of Microsoft Excel: Course 1 – Excel Basics

Unlocking the Secrets of Microsoft Excel: Course 2 – Beyond the Basics

Unlocking the Secrets of Microsoft Excel: Course 3 – Power Excel

Unlocking the Secrets of Microsoft Excel: Shortcuts, Tips, and Tricks

Unlocking the Secrets of Microsoft Excel: Formulas 1

Unlocking the Secrets of Microsoft Excel: Formulas 2

Unlocking the Secrets of Microsoft Excel: Macros

Unlocking the Secrets of Microsoft Excel: PivotTables

Unlocking the Secrets of Microsoft Suite by CareerTrack

Learn how to set up Microsoft Office applications to meet your personal needs at work or at home.

Unlocking the Secrets of Microsoft PowerPoint

Unlocking the Secrets of Microsoft Outlook

Unlocking the Secrets of Microsoft Access

Unlocking the Secrets of Microsoft Word

Unlocking the Secrets of Microsoft Excel

Budgeting & Finance Templates by CareerTrack

Interactive training program for Managers, Supervisors, and Business Owners using a business budget template.

Templates for Today's Time-Crunched Professional by CareerTrack



Appendix

Improve efficiency with time management training.

Software

ConceptDraw® Office 3 Project Management Software

ConceptDraw Office is an innovative, comprehensive, and integrated project management software package that helps you achieve your business and project goals. ConceptDraw Office will help you develop, manage, and measure your projects with these three interactive tools:

ConceptDraw MINDMAP: Brainstorming and organization for ideas, data and processes (also sold individually).

ConceptDraw PROJECT: Comprehensive project management tool

ConceptDraw PRO: High-powered drawing and diagramming tool

Webinars

60 Minutes of Excel Secrets

Learn basic through advanced tips on how to get work done faster and easier in Excel.

Microsoft® Excel® Made Easy Series

Microsoft® Excel® Made Easy

Microsoft® Excel® PivotTables Made Easy

Microsoft® Excel® Charts and Graphs Made Easy

Microsoft® Excel® Forms & Reporting Made Easy

Microsoft® Excel® Formulas Made Easy

Microsoft® Excel® Macros Made Easy

Websites

Excel Tips and Tricks - <http://www.pryor.com/blog/category/excel/>

Read interesting blog articles and tips to get the most out of Excel.

Microsoft Official Help Pages - <https://support.office.com/en-US/Excel>

Read articles, search topics, view training videos, or contact a support technician (via chat).

Microsoft Training Center - <https://support.office.com/en-us/office-training-center/Excel-tips>

Read tips and find articles about Excel, written by the people that built it.

Excel Forum - <https://www.excelforum.com/>

Message boards for community questions and community-sourced answers about many Excel topics.

ExcelFunctions.net - <http://www.excelfunctions.net/>

Website created to provide help with Excel functions and formulas.

*How about
talk about
we all paid money to
lead a how to
overcome*



PRYOR
Learning · Solutions

FRED PRYOR SEMINARS
CAREERTRACK.



Microsoft® Excel® The Basics

NOTES & ACTIVITIES GUIDE

PRYORITIZE LEARNING.

DISCLAIMER: Purchasers, readers, or users of this course agree to be bound by the following terms: Information contained in this course has been obtained by Pryor Learning Solutions from sources believed to be reliable. The subject is constantly evolving, and the information provided is not exhaustive. The advice and strategies contained should not be used as a substitute for consulting with a qualified professional where professional assistance is required or appropriate, or where there may be any risk to health or property. In no event will Pryor Learning Solutions or any of its respective affiliates, distributors, employees, agents, content contributors, or licensors be liable or responsible for damages including direct, indirect, special, consequential, incidental, punitive, exemplary losses, or damages and expenses including business interruption, loss of profits, lost business, or lost savings. For purposes of illustrating the concepts and techniques described in this course, the author has created fictitious names; mailing, e-mail, and internet addresses; phone numbers and fax numbers; and similar information. Any resemblance of this fictitious data that is similar to an actual person or organization is unintentional and purely coincidental.

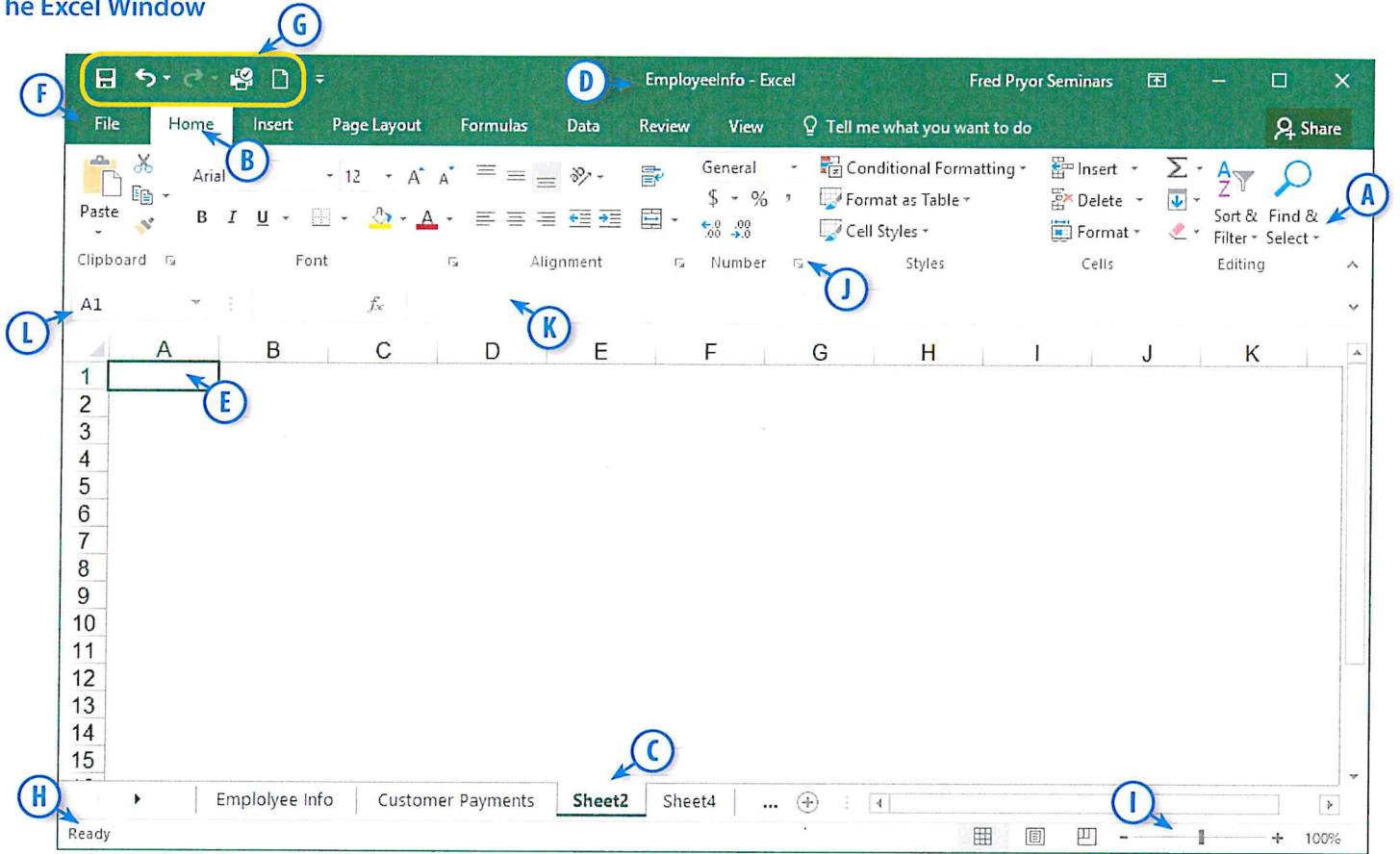


©2018 Pryor Learning Solutions, Inc. Registered U.S. Patent & Trademark Office and Canadian Trade-Marks office. Except for the inclusion of brief quotations in a review, no part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Pryor Learning Solutions, Inc.



Getting Started

The Excel Window



A		The strip of buttons and icons above the work area.
B		A collection of functionally- related controls and menus.
C		An individual spreadsheet with rows & columns or a chart.
D		A file containing multiple worksheets.
E		Marks the currently active cell or range.
F		Provides access to options such as open, save, print, etc.
G		Stores shortcuts to frequently used features.
H		Hosts specific shortcuts and information about a workbook.
I		Controls the magnification of the screen.
J		Launches the associated dialog box.
K		Displays the contents of the currently active cell.
L		Displays the name of the currently active cell.



Design and Build

Five things that can go in an Excel worksheet:

1. _____
2. _____
3. _____
4. _____
5. _____

Use the AutoFill Handle

Use AutoFill to quickly copy one value to multiple cells or to populate adjacent cells with data series (such as Dates, Days, Months).

PowerUser Tip: For more fill options, click the **AutoFill Options** dropdown arrow [A].

1st Qtr	Monday	9/1/2017	January
2nd Qtr	Tuesday	9/2/2017	January
3rd Qtr	Wednesday	9/3/2017	January
4th Qtr	Thursday	9/4/2017	January
1st Qtr	Friday	9/5/2017	January

Select cells, columns and rows:

Useful Keyboard Shortcuts:

Cut » Ctrl + _____

Copy » Ctrl + _____

Paste » Ctrl + _____

Undo » Ctrl + _____

Redo » Ctrl + _____



Formulas

Data calculation and analysis are the primary reasons to use Microsoft Excel. Formulas are a key element in effective calculation.

Rule #1: All formulas must begin with an equal sign (=).

Rule #2: Math in formulas is carried out left to right according to the "Order of Operations."

Function	Operator	Example	Power Phrase
Parentheses	()	$2*(3+2)=10$	
Exponents	^	$3^2=9$	
Multiplication	*	$3*2=6$	
Division	/		
Addition	+	$3+2=5$	
Subtraction	-	$3-2=1$	

Which is the correct answer?
=5+6*10
110 or 65

Cells in Formulas

- Column references are always letters
- Row references are always numbers

Try It!

Create a formula in cell C4 that calculates the total price for each item, including tax and shipping.

Note: Only apply the tax to the item price, not to the shipping.

	A	B	C
1	Tax Rate	8.25%	
2			
3	Prices	Shipping	Total
4	\$12.00	\$2.00	
5	\$15.00	\$3.00	
6	\$18.00	\$4.00	
7	\$25.00	\$5.00	
8			

Formula: _____

Relative VS. Absolute Referencing

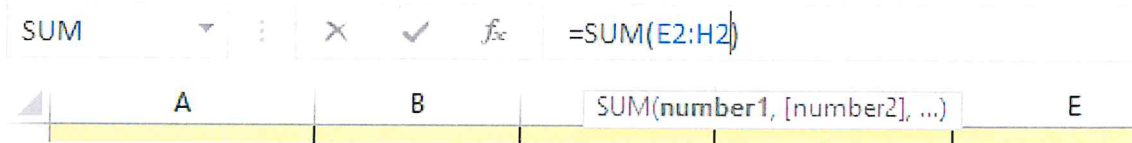
- **Relative** cell references adjust to the new row or column when a formula is copied.
- **Absolute** cell references use the \$ symbol to prevent a formula from adjusting cell references when copied. A \$ may be applied to either or both components of a cell reference: **\$B1 B\$1 \$B\$1** Which cell in our example should use absolute cell references?



Functions

Think of functions as task-based, pre-programmed formulas. Functions are always formatted as follows:

=FunctionName(arguments)



Create a Summary Sheet:

In this example, we need to add all four quarters for each state.

	B	C	D	E	F	G		B	C	D	E	
3	First Quarter Sales							3	Year End Summary			
4		January	February	March	Total Sales		4	Grand Total Sales				
5	California	\$1,345.00	\$2,345.00	\$4,567.00	\$8,257.00		5	California				
6	Florida	\$3,333.00	\$3,456.00	\$6,443.00	\$13,232.00		6	Florida				
7	Georgia	\$2,356.00	\$7,665.00	\$9,999.00	\$20,020.00		7	Georgia				
8	Indiana	\$4,000.00	\$4,444.00	\$5,555.00	\$13,999.00		8	Indiana				
							9					

Summary | **First Quarter** | Second Quarter | Third Quarter | Fourth Quarter

Summary | First Quarter | Second Quarter

For California's total, we could write:

='First Quarter'!F5+'Second Quarter'!F5+'Third Quarter'!F5+'Fourth Quarter'!F5

1. Circle each complete cell reference in the formula
2. Draw a line from the cell reference in the formula to the source worksheet
3. Circle the cell in the Summary worksheet where the formula will be placed.



Using 3D Referencing, we get this: **=SUM('First Quarter:Fourth Quarter'!F5)**



SEMINAR NOTES & ACTIVITY GUIDE

Report

Organize and Display Data

Data formatted as a list are easy to read and understand, making that formatting choice ideal for reports.

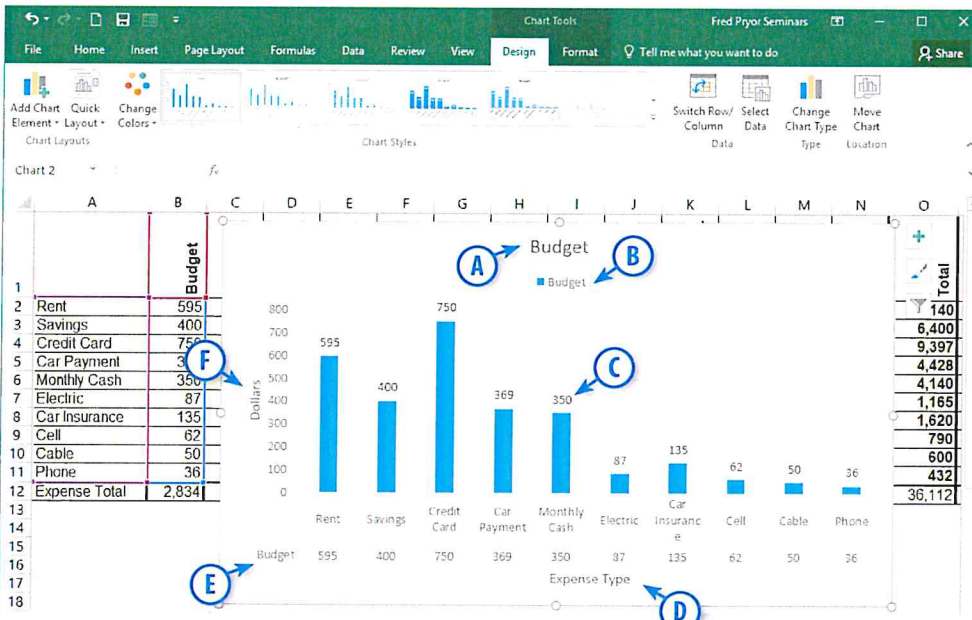
7 Habits of Effective Lists:

1. Always create a Header Row.	5. Use formatting to highlight portions of the data.
2. Format the header row so it is easily distinguishable from the rest of the data.	6. Do not merge cells within the list.
3. Always build the list from top to bottom, not from left to right.	7. Be consistent – always use Delaware or always use DE, not a mix of the two.
4. Do not include any entirely blank rows or columns in the data.	

Circle all of the things that need to be changed to correct this example:

	A	B	C	D	E	F	G
1	Ryan	John	29 W. Corinthians Way	Tarpon Springs	Delaware	24394	913-834-2459
2	Ballard	Richard	8305 Ruth Dr. SE	Clearwater	PA	78667	(215) 733-6778
3	Wilmot	Robb	432 Ephesians Blvd.	Daman	FL	34698	(727) 987-4445
4	Lindt	Doug	316 Luke Circle	Phoenix	AZ	19323	(459) 525-2945
5	Prindle	Sherry	235 Genesis Court	Mobile	AL	13924	(290) 733-7727
6	Vickers	Mark	112 Matthew Rd.	Safety Harbor	LA	46688	(395) 785-6667
7							
8	Perkins	Joe	349 W. Sampson St.	San Francisco	CA	43733	(656) 545-2345
9	Muhammad	Rodney	7 Kings Hwy.	Orlando	FL	34688	(843) 734-9995
10	Karklins	Maris	443 Titus Ave.	Pearly Gates	OH	56932	(909) 334-8721
11	Rock	Chris	31 Proverbs Place	Virtuous Bay	MA	09732	(507) 288-3235

Chart Terminology



A.
B.
C.
D.
E.
F.



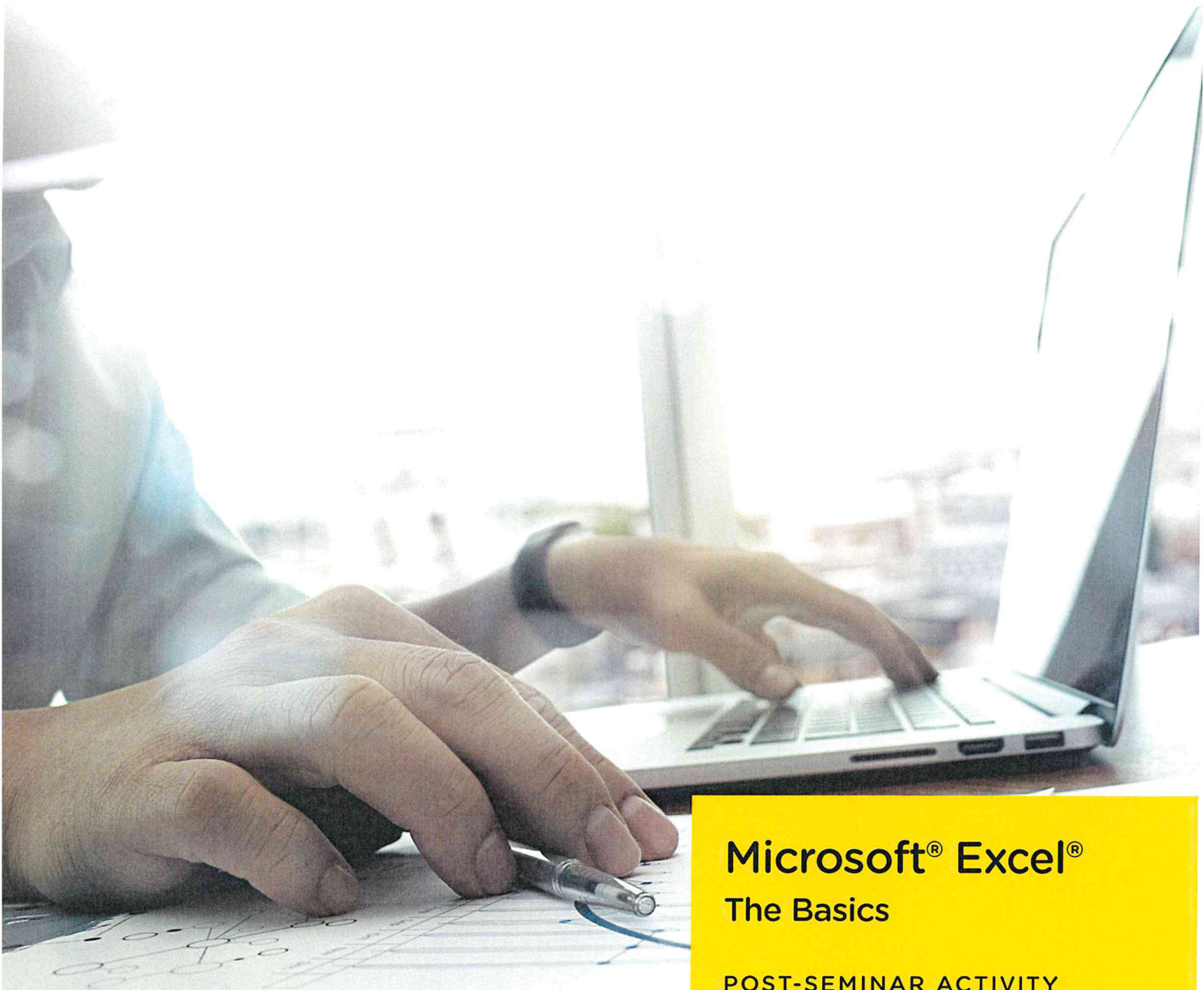
Macros

What is a Macro?

Any repetitive set of tasks that are performed exactly the same way every time is a good candidate for becoming a macro. For example:

- A report is generated weekly and must be printed using the same layout and settings each time.
- You receive a weekly spreadsheet exported from an external source and you must adjust the data (such as changing the order and names of columns) each time to align it with your format standards.
- You apply a standardized header and footer and company logo to each spreadsheet you produce
- You apply a custom formula to raw data received from an external source.

What repetitive tasks do you perform regularly?



Microsoft® Excel®
The Basics

POST-SEMINAR ACTIVITY

**PRYORITIZE
LEARNING.**

DISCLAIMER: Purchasers, readers, or users of this course agree to be bound by the following terms: Information contained in this course has been obtained by Pryor Learning Solutions from sources believed to be reliable. The subject is constantly evolving, and the information provided is not exhaustive. The advice and strategies contained should not be used as a substitute for consulting with a qualified professional where professional assistance is required or appropriate, or where there may be any risk to health or property. In no event will Pryor Learning Solutions or any of its respective affiliates, distributors, employees, agents, content contributors, or licensors be liable or responsible for damages including direct, indirect, special, consequential, incidental, punitive, exemplary losses, or damages and expenses including business interruption, loss of profits, lost business, or lost savings. For purposes of illustrating the concepts and techniques described in this course, the author has created fictitious names; mailing, e-mail, and internet addresses; phone numbers and fax numbers; and similar information. Any resemblance of this fictitious data that is similar to an actual person or organization is unintentional and purely coincidental.





POST-SEMINAR ACTIVITY

Host a Lunch & Learn

Keep the momentum going with a Lunch and Learn “hosted” by Pryor Learning Solutions. Here is a guide to plan and execute an hour-long, self-guided session. Topic ideas include Excel skills that reinforce and compliment the *Excel-The Basics* seminar.

Plan

A successful Lunch and Learn takes foresight and planning. Here are some basic steps you’ll want to take:

- Schedule a time and reserve a room and any appropriate equipment needed (such as a computer or video display equipment).
- Finalize details: caterer (if wanted), simple drinks such as coffee and water if attendees will bring their own lunches, budget, topic, incentives if appropriate.
- Promote – Send invitations, “advertise” the event in appropriate communications channels, collect reservations, etc.
- Send reminders day before and day of event.
- Have a little fun – If your work environment is amenable, think about lunch items or activities that fit the “theme” of your topic. Example: Going over formulas? Invite attendees to bring their favorite recipe and then note how building a formula using functions is similar to following a recipe.

Bonus – Pro Tips

- **Hot Tips From Your Team:** Ask everyone to bring their favorite Excel shortcut to share.
- **Most Useful Functions:** Introduce 3-5 of the most common and most used Excel functions with examples of how they are used. Have attendees vote on the ones they would like to learn!
- **Excel Shortcuts:** Introduce several of Excel’s most useful shortcuts – both keyboard and via the Excel UI.
- **Chart Design:** Find an expert or a skilled designer in your community to talk about the design aspects of creating impactful charts and graphs. Emphasize skills such as compatible colors, fonts, and layout over Excel steps.

Explore More with Pryor

Microsoft Excel Made Easy - Get familiar with the basics: functions, formulas, commands and more.

Microsoft Excel Formulas Made Easy – Easily automate calculations and tasks to increase efficiency with basic and advanced Excel formulas.

60 Minutes of Microsoft Excel Secrets – Learn to customize, organize and format your spreadsheets with ease.



POST-SEMINAR ACTIVITY

Cut & Save

Get the Most Out of Your Seminar

Here are several exercises to help you solidify and retain the skills taught in *Excel-The Basics*. After a good night's sleep, you'll be ready to hit your desk and try out what you've learned. Refer to your pre-seminar workbook to remind you of your goals and the challenges you identified as most important.

Day After Seminar

- Find the pages in your digital seminar workbook that show your two to three highest priority tasks.
- Follow the steps in your workbook to perform each task on your own data.
- Print just those pages for you to keep beside your workstation as you incorporate the skills in to your daily work.

Week After Seminar

- Using the seminar workbook table of contents or your notes, make a list of 10 additional skills you wish to practice and reinforce.
- Practice two skills each day.
- Open your digital seminar workbook to the skill and follow the steps to perform each task on your own data.
- Print only the pages for skills that you would like to incorporate into your daily work.
- If needed, practice one or two high priority skills each day as well.

Month After Seminar

- Once you are comfortable with your highest priority skills, choose one or two "reach" skills with which you would like to challenge yourself.
- When an opportunity presents itself to practice a reach skill during your work, set aside some extra time to complete the task. For example: You may not usually use Sparklines in your monthly report, but give them a try this month!
- Optional challenge – work through the entire digital seminar workbook, front to back, and quickly apply each skill to a practice worksheet of your own data. If you can recognize and complete at least 75% of the skills, you are ready for Excel Beyond the Basics!

Be Patient! It may take you longer to complete your work as you incorporate new skills, but the time you are taking will be worth it the next time the task comes up! Set aside learning time along with your work as an investment in YOU.



POST-SEMINAR ACTIVITY

You May Also Like

Learning Experts recommend reinforcing new skills with practice and repetition. Listed here are several follow-up courses available with Pryor+ that we recommend as a next step after *Excel - The Basics*.

Have Access to Pryor+?

Here are some resources you may find helpful:

(these are all short 1 minute Online courses available on **Pryor+**)

- Choose Which Part of Your Worksheet to Print in Microsoft® Excel® 2016
- Insert a Chart in Microsoft® Excel® 2016
- Page Setup in Microsoft® Excel® 2016
- Record a Macro in Microsoft® Excel® 2016
- Adjust Row Height and Column Width in Microsoft® Excel® 2016
- Freeze and Unfreeze Columns and Rows in Microsoft® Excel® 2016
- Hide and Unhide Columns and Rows in Microsoft® Excel® 2016
- Insert a Basic Formula in Microsoft® Excel® 2016
- Insert a Basic Function in Microsoft® Excel® 2016

To learn more about Pryor+,
visit: pryor.com/unlimited-training/

With over 4,500 Online courses and thousands of live seminars nationwide, the opportunities to learn are right at your fingertips!

Go Deeper

Excel® Basics Learning Path - Essential Excel Formulas and Functions for Beginners

Learn how to successfully set up and use basic Excel formulas and functions using these tips, tricks, and shortcuts.
Length: 1 hours 15 minutes

Excel® 2013 Part 1 Series

This series is a review of basic options and tools in Microsoft Excel 2013.

Microsoft® Excel® 2013 Basic

Software Training - eBook (downloadable PDF)

Excel Beyond the Basics (Y7) Seminar

Login to register, or if you aren't on Pryor+, visit pryor.com/unlimited-training/ to learn more.