Technical Institute of Administration

Business Administration

Computer Skills

1. Microsoft Excel – Basics- Working with Cells and Sheets

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1. Excel 2016 Basics

1.1. Introduction

Excel is a **spreadsheet program** that allows you to **store**, **organize**, and **analyze information**. While you may believe Excel is only used by certain people to process complicated data, anyone can learn how to take advantage of the program's **powerful features**. Whether you're keeping a budget, organizing a training log, or creating an invoice, Excel makes it easy to work with different types of data.

1.2. Getting to know Excel

If you've previously used Excel 2010 or Excel 2013, then Excel 2016 should feel familiar. If you are new to Excel or have more experience with older versions, you should first take some time to become familiar with the **Excel interface**.

1.3. The Excel interface

When you open Excel 2016 for the first time, the **Excel Start Screen** will appear. From here, you'll be able to create a **new workbook**, choose a **template**, and access your **recently edited workbooks**.

- From the **Excel Start Screen**, locate and select **Blank workbook** to access the Excel interface.
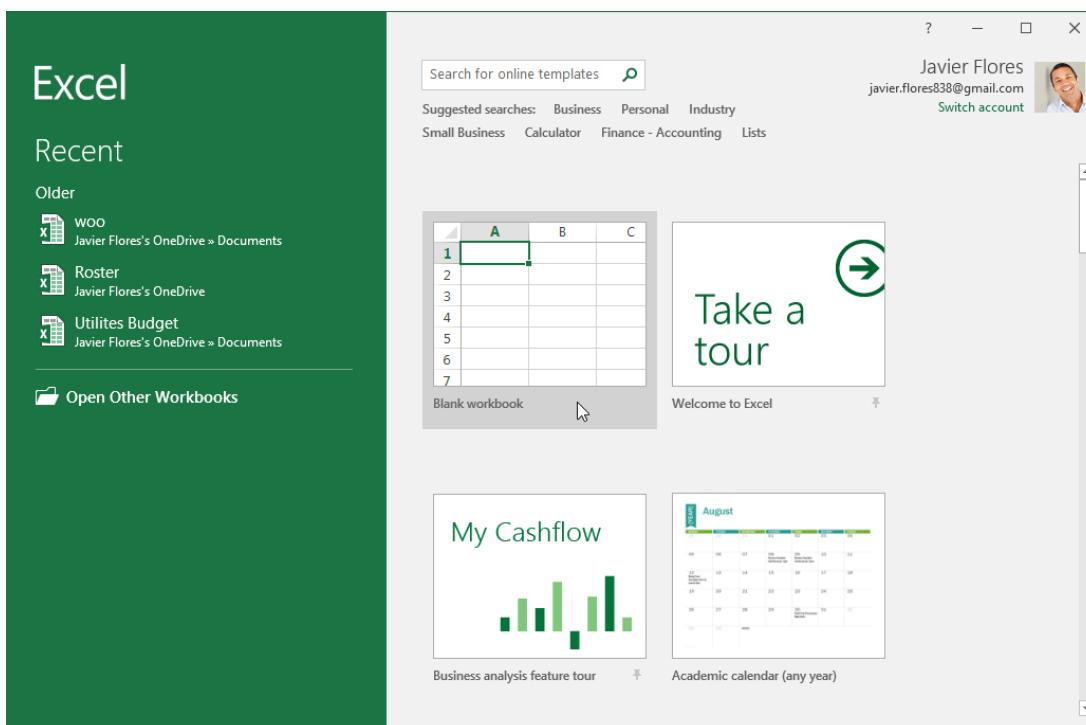
Click the buttons in the below to become familiar with the Excel interface.
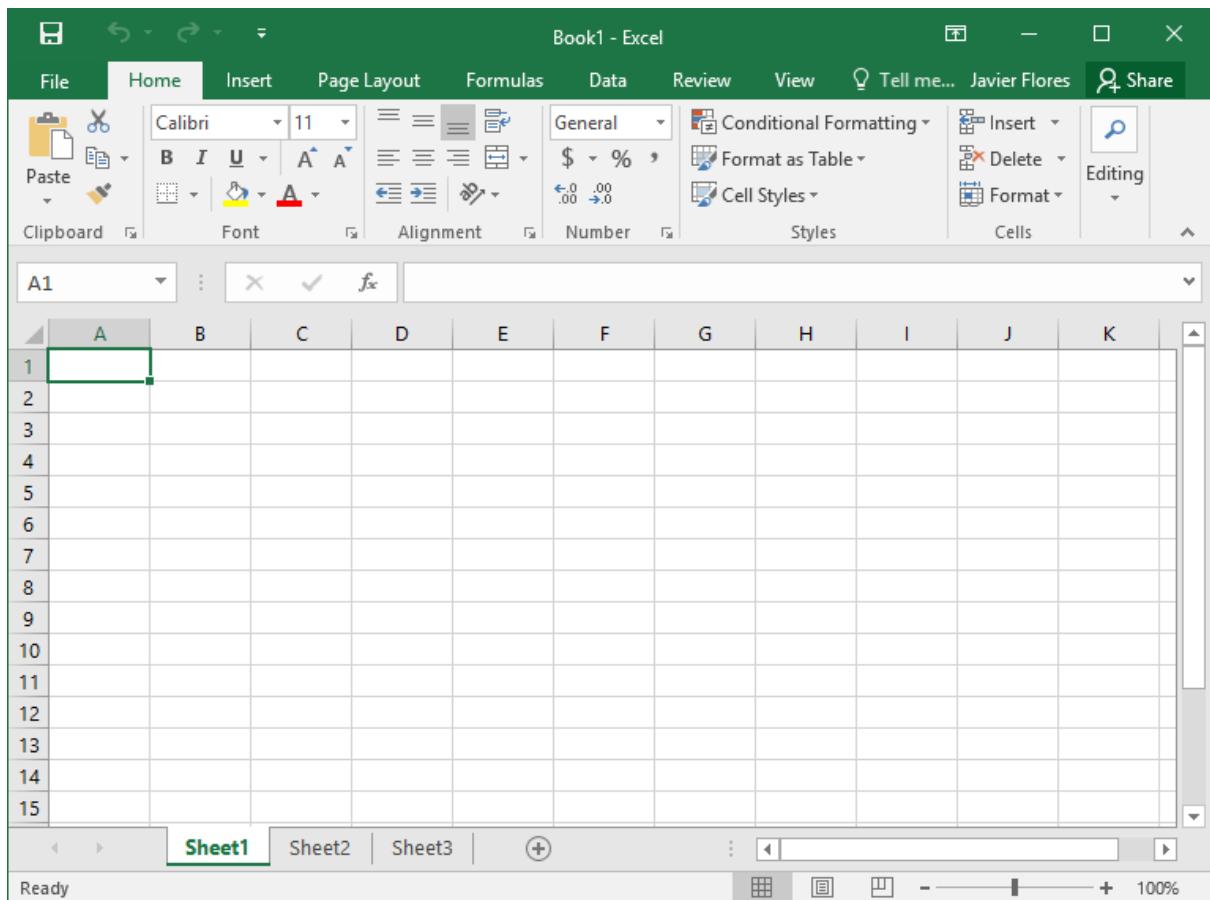
1.4. Working with the Excel environment

The **Ribbon** and **Quick Access Toolbar** are where you will find the commands to perform common tasks in Excel. The **Backstage view** gives you various options for saving, opening a file, printing, and sharing your document.

1.4.1. The Ribbon

Excel 2016 uses a **tabbed Ribbon system** instead of traditional menus. **The Ribbon** contains **multiple tabs**, each with several **groups of commands**. You will use these tabs to perform the most **common tasks** in Excel.

- Each tab will have one or more groups.
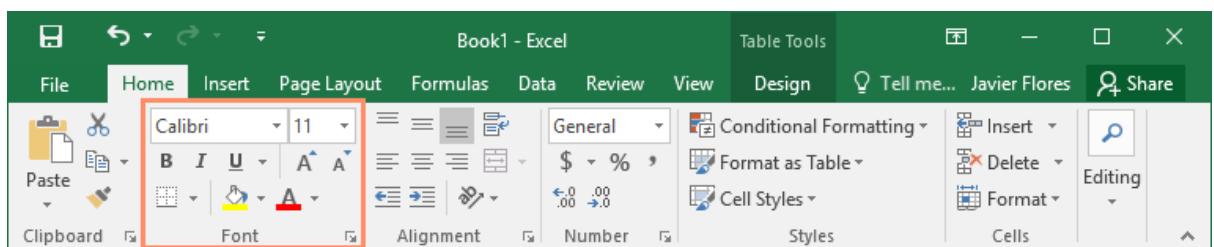
- Some groups will have an arrow you can click for more options.
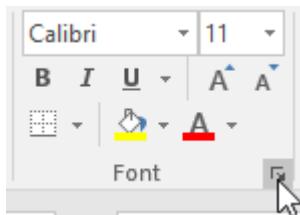
- Click a tab to see more commands.
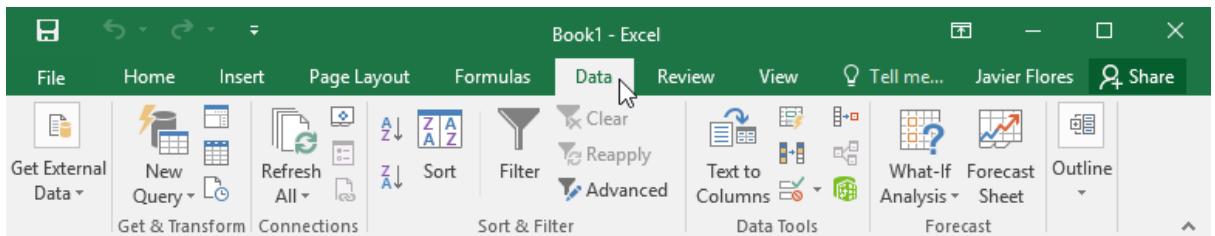
- You can adjust how the Ribbon is displayed with the Ribbon Display Options.

Certain programs, such as **Adobe Acrobat Reader**, may install additional tabs to the Ribbon. These tabs are called **add-ins**.

1.4.2. To change the Ribbon Display Options:

The Ribbon is designed to respond to your current task, but you can choose to **minimize** it if you find that it takes up too much screen space. Click the **Ribbon Display Options** arrow in the upper-right corner of the Ribbon to display the drop-down menu.

There are three modes in the Ribbon Display Options menu:

- **Auto-hide Ribbon:** Auto-hide displays your workbook in full-screen mode and completely hides the Ribbon. To **show the Ribbon**, click the **Expand Ribbon** command at the top of screen.
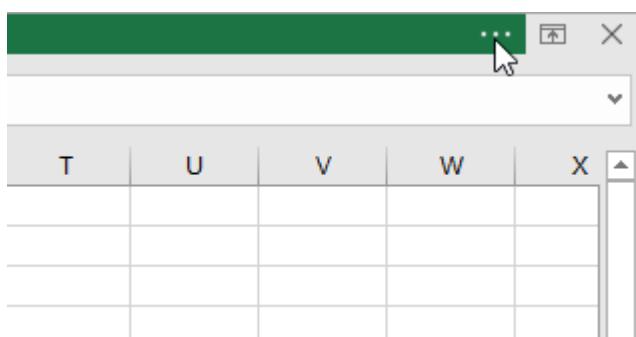
- **Show Tabs:** This option hides all command groups when they're not in use, but **tabs** will remain visible. To **show the Ribbon**, simply click a tab.
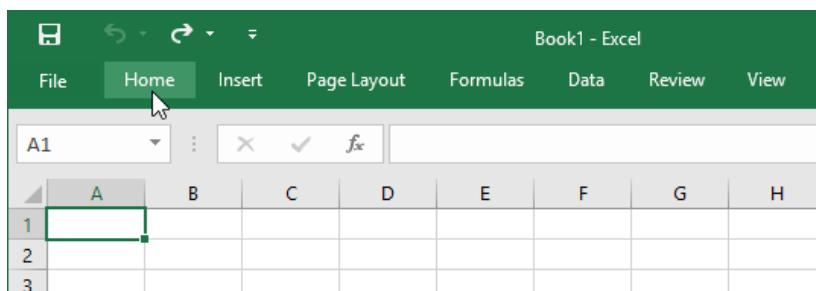
- **Show Tabs and Commands:** This option maximizes the Ribbon. All of the tabs and commands will be visible. This option is selected by default when you open Excel for the first time.

1.5. The Quick Access Toolbar

Located just above the Ribbon, the **Quick Access Toolbar** lets you access common commands no matter which tab is selected. By default, it includes the **Save**, **Undo**, and **Repeat** commands. You can add other commands depending on your preference.

1.5.1. To add commands to the Quick Access Toolbar:

1. Click the **drop-down arrow** to the right of the **Quick Access Toolbar**.
2. Select the **command** you want to add from the drop-down menu. To choose from more commands, select **More Commands**.
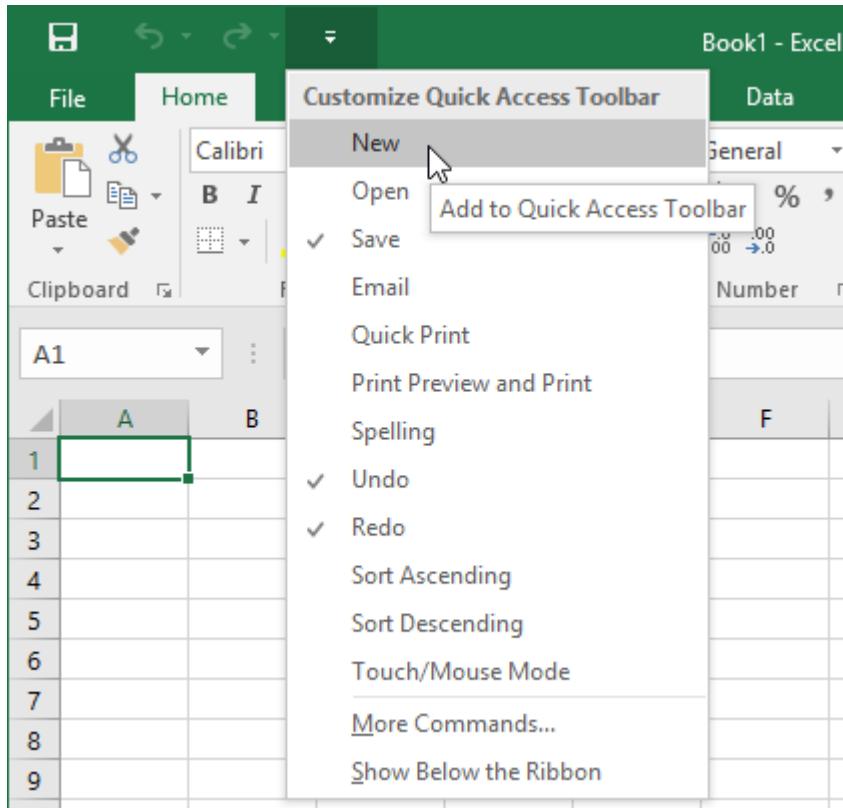

3. The command will be **added** to the Quick Access Toolbar.
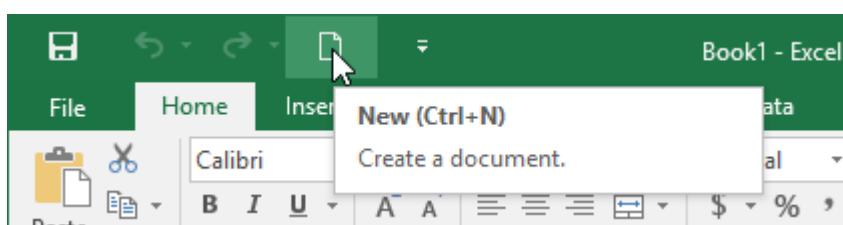
1.5.2. How to use Tell me:

The **Tell me** box works like a search bar to help you quickly find tools or commands you want to use.
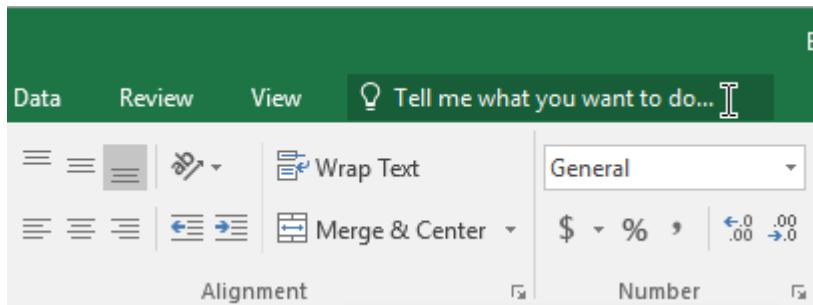
1. Type in your own words what you want to do.
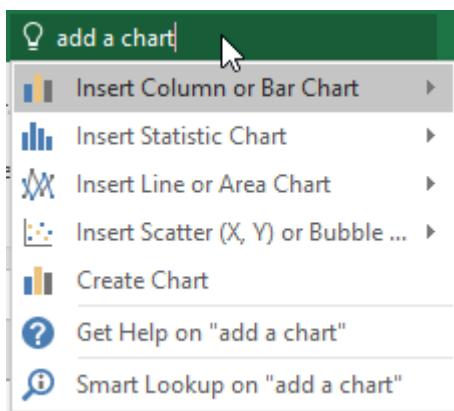
2. The results will give you a few relevant options. To use one, click it like you would a command on the Ribbon.
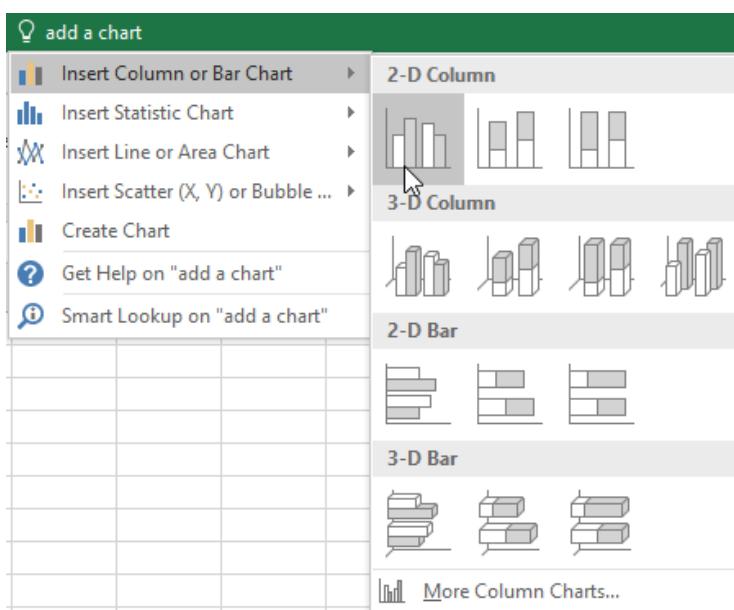
1.6. Worksheet views

Excel 2016 has a variety of viewing options that change how your workbook is displayed. These views can be useful for various tasks, especially if you're planning to **print** the

spreadsheet. To **change worksheet views**, locate the commands in the bottom-right corner of the Excel window and select **Normal view**, **Page Layout view**, or **Page Break view**.
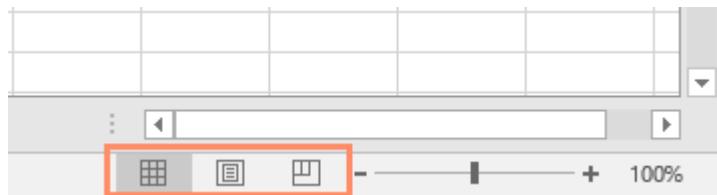

- **Normal view** is the default view for all worksheets in Excel.

- **Page Layout view** displays how your worksheets will appear when printed. You can also add headers and footers in this view.

- **Page Break view** allows you to change the location of page breaks, which is especially helpful when printing a lot of data from Excel.

1.6.1. Backstage view

Backstage view gives you various options for saving, opening a file, printing, and sharing your workbooks.

### 1.6.1.1.   To access Backstage view:

1. Click the **File** tab on the **Ribbon**. **Backstage view** will appear.

Click the buttons in the interactive below to learn more about using Backstage view.

1.7.Creating and Opening Workbooks

Excel files are called **workbooks**. Whenever you start a new project in Excel, you'll need to **create a new workbook**. There are several ways to start working with a workbook in Excel. You can choose to **create a new workbook**—either with a **blank workbook** or a predesigned **template**—or **open an existing** workbook.

1.7.1. To create a new blank workbook:

1. Select the **File** tab. **Backstage view** will appear.

2. Select **New**, then click **Blank workbook**.
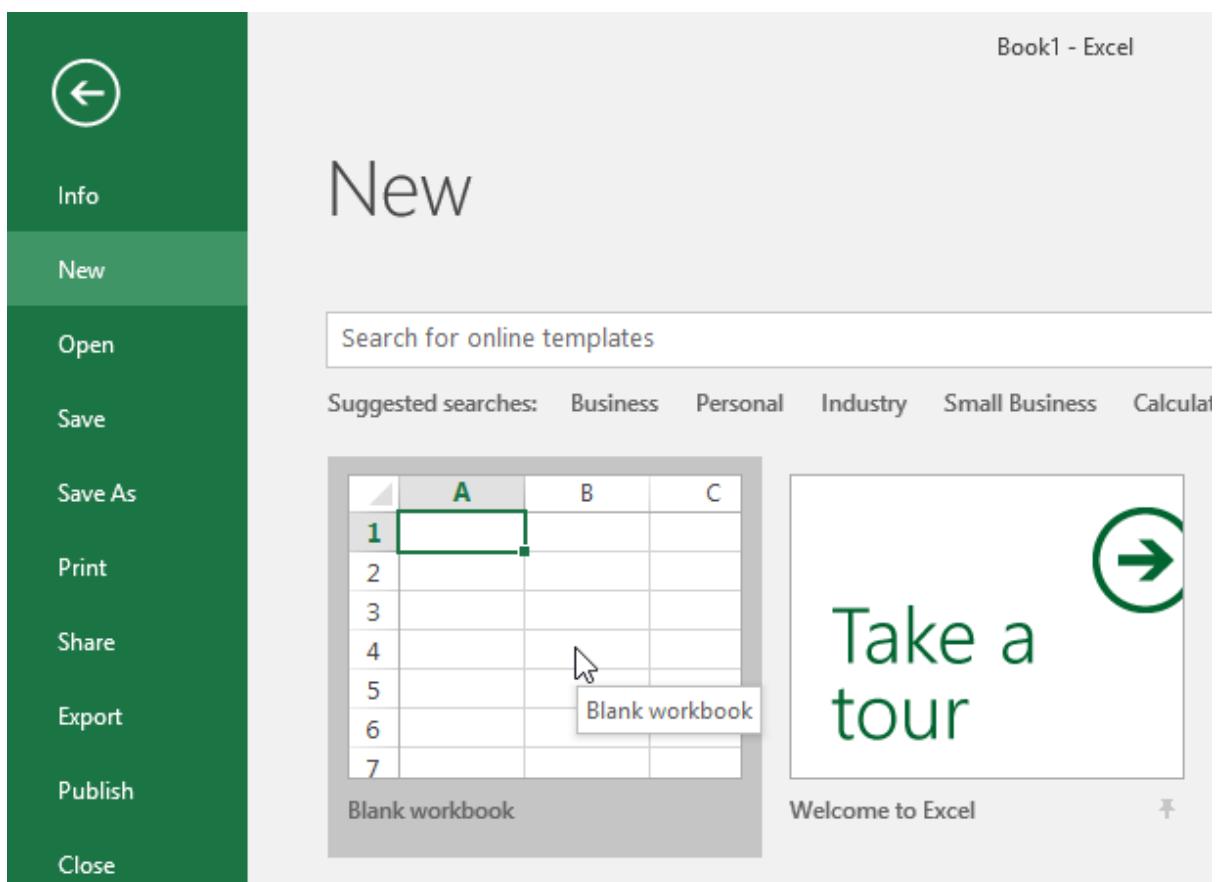
3. A new blank workbook will appear.

1.7.2. To open an existing workbook:

In addition to creating new workbooks, you'll often need to open a workbook that was previously saved.

1. Navigate to **Backstage view**, then click **Open**.
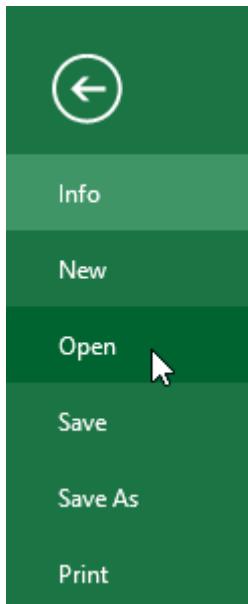

2. Select **Computer**, then click **Browse**. Alternatively, you can choose **OneDrive** to open files stored on your **OneDrive**.
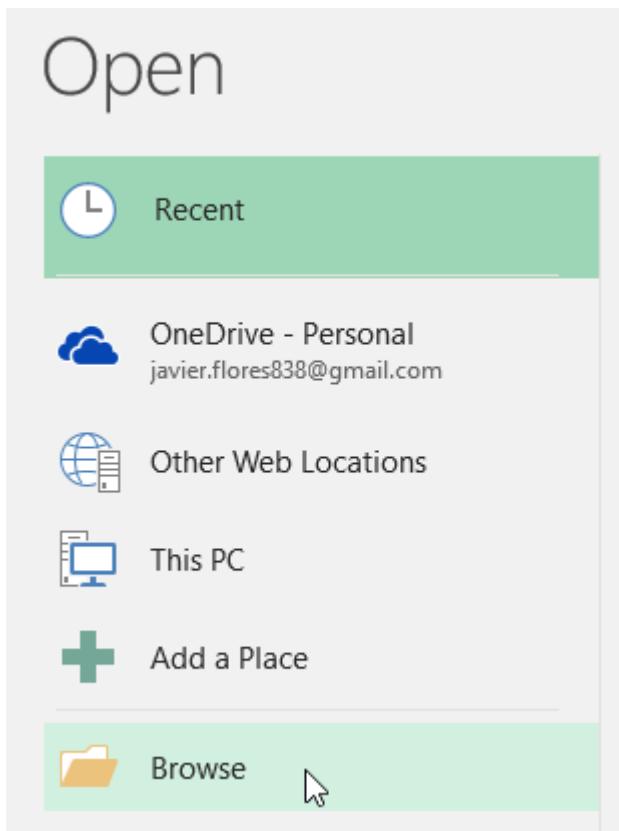
3. The **Open** dialog box will appear. Locate and select your **workbook,** then click **Open**.
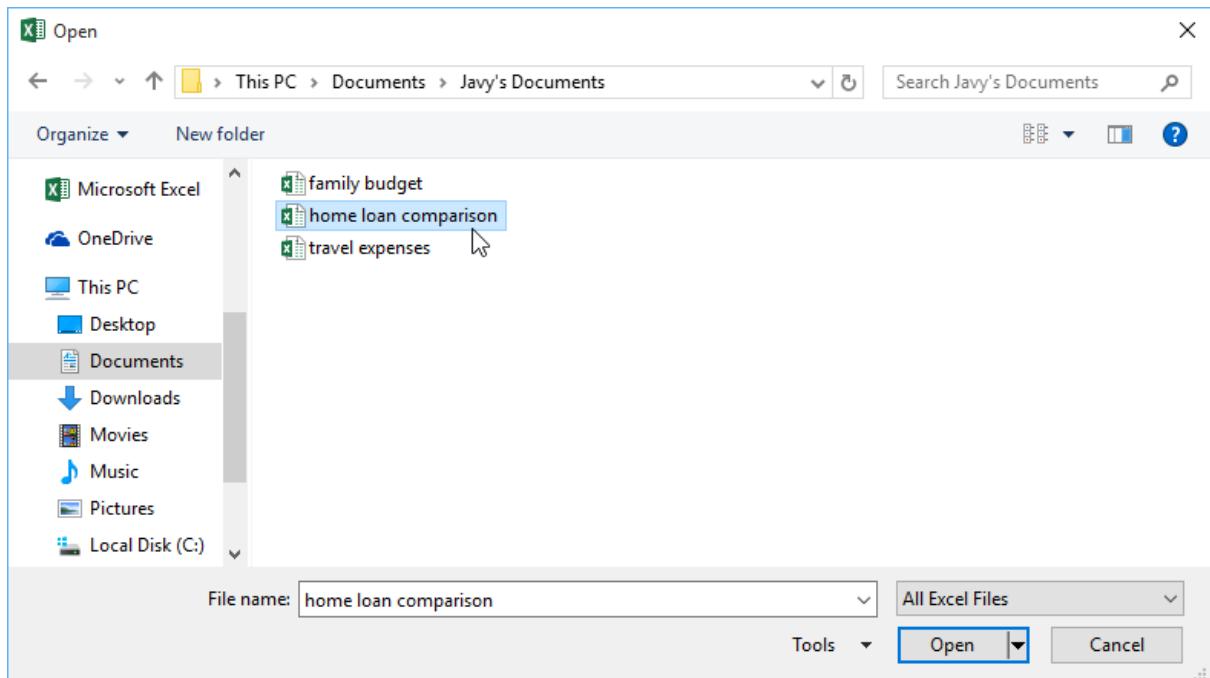
If you've opened the desired workbook recently, you can browse your **Recent Workbooks** rather than search for the file.
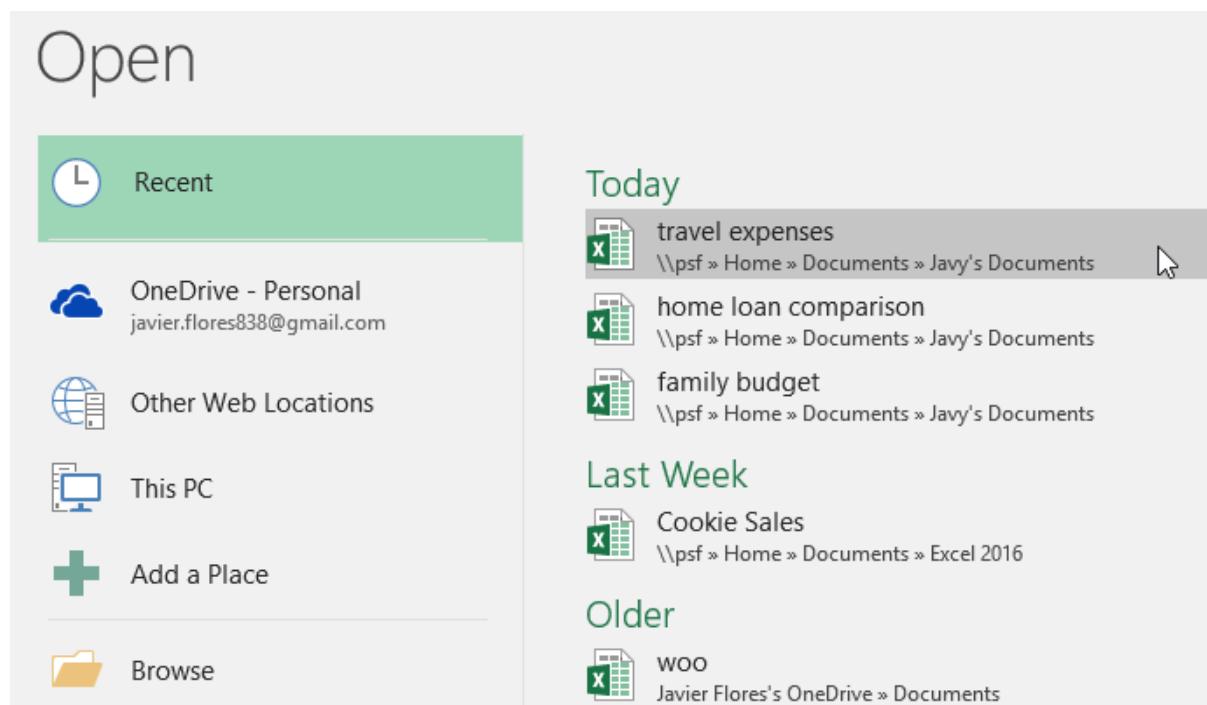
1.7.3. To pin a workbook:

If you frequently work with the **same workbook**, you can **pin it** to Backstage view for faster access.

1. Navigate to **Backstage view**, then click **Open**. Your **recently edited workbooks** will appear.
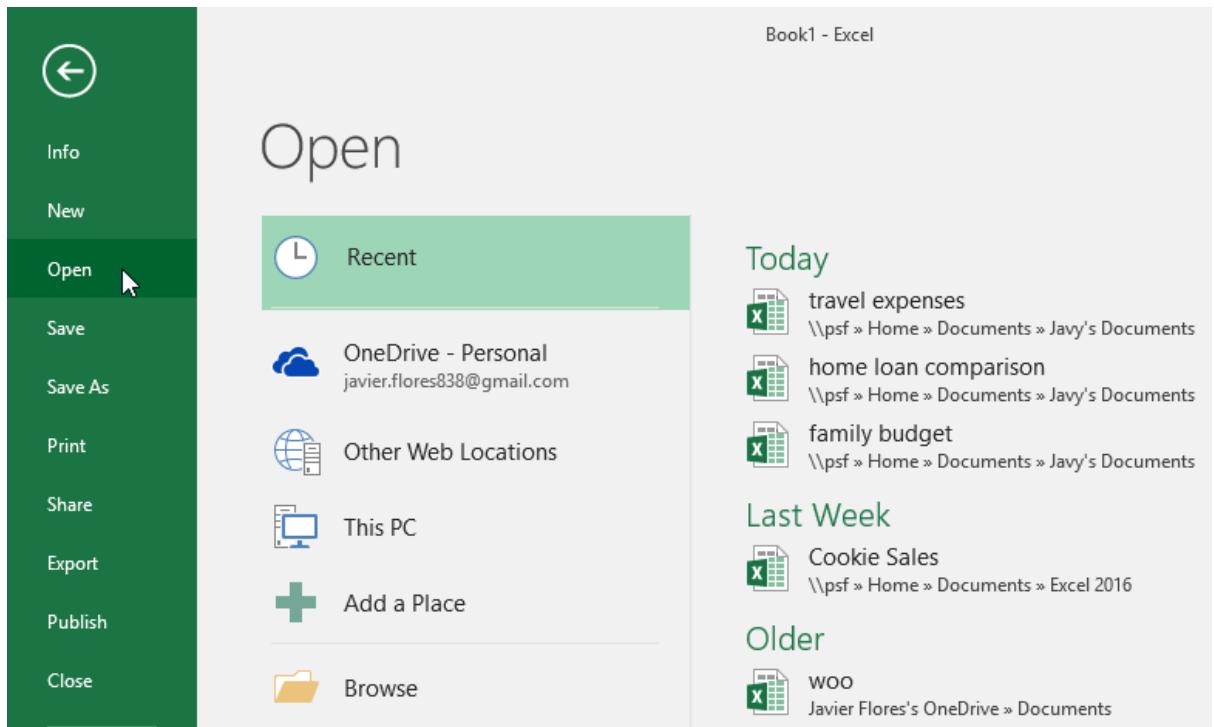
2. Hover the mouse over the **workbook** you want to pin. A **pushpin icon** will appear next to the workbook. Click the **pushpin icon**.

3. The workbook will stay in Recent Workbooks. To **unpin** a workbook, simply click the pushpin icon again.

1.7.4. Using templates

A **template** is a **predesigned spreadsheet** you can use to create a new workbook quickly. Templates often include **custom formatting** and **predefined formulas**, so they can save you a lot of time and effort when starting a new project.

1.7.4.1. To create a new workbook from a template:

1. Click the **File** tab to access **Backstage view**.
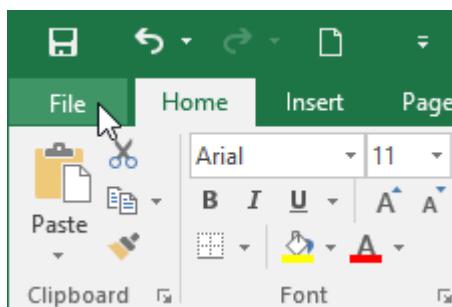
2. Select **New**. Several templates will appear below the **Blank workbook** option.
3. Select a **template** to review it.
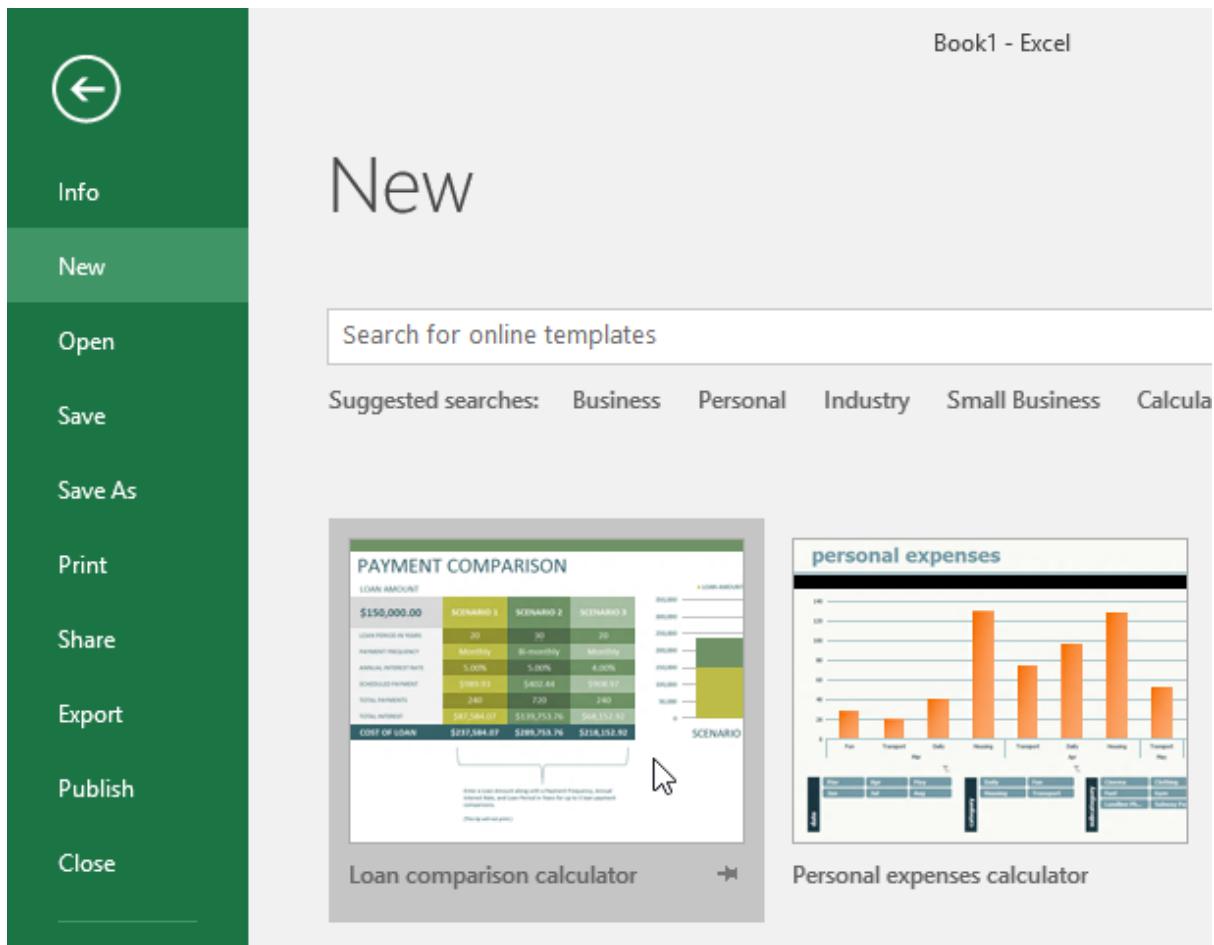
4. A **preview** of the template will appear, along with **additional information** on how the template can be used.
5. Click **Create** to use the selected template.
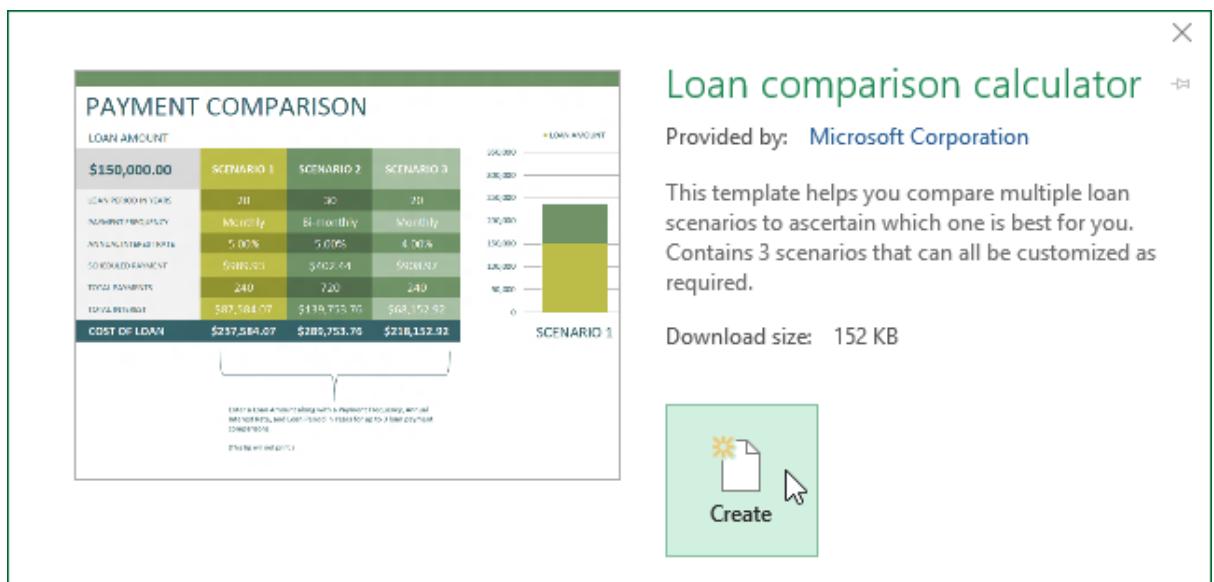
6. A new workbook will appear with the **selected template**.

You can also browse templates by **category** or use the **search bar** to find something more specific.

It's important to note that not all templates are created by Microsoft. Many are created by third-party providers and even individual users, so some templates may work better than others.

1.8.Save and Save As

Excel offers two ways to save a file: **Save** and **Save As**. These options work in similar ways, with a few important differences:

- **Save**: When you create or edit a workbook, you'll use the **Save** command to save your changes. You'll use this command most of the time. When you save a file, you'll only need to choose a file name and location the first time. After that, you can just click the Save command to save it with the same name and location.
- **Save As**: You'll use this command to create a **copy** of a workbook while keeping the original. When you use Save As, you'll need to choose a different name and/or location for the copied version.

1.8.1. To save a workbook:

It's important to **save your workbook** whenever you start a new project or make changes to an existing one. Saving early and often can prevent your work from being lost. You'll also need to pay close attention to **where you save** the workbook so it will be easy to find later.

1. Locate and select the **Save** command on the **Quick Access Toolbar**.
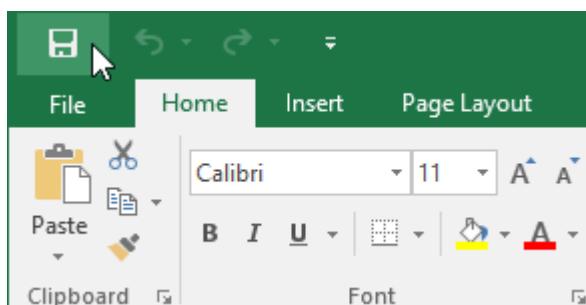
2. If you're saving the file for the first time, the **Save As** pane will appear in **Backstage view**.
3. You'll then need to choose **where to save** the file and give it a **file name**. To save the workbook to your computer, select **Computer**, then click **Browse**. Alternatively, you can click **OneDrive** to save the file to your OneDrive.
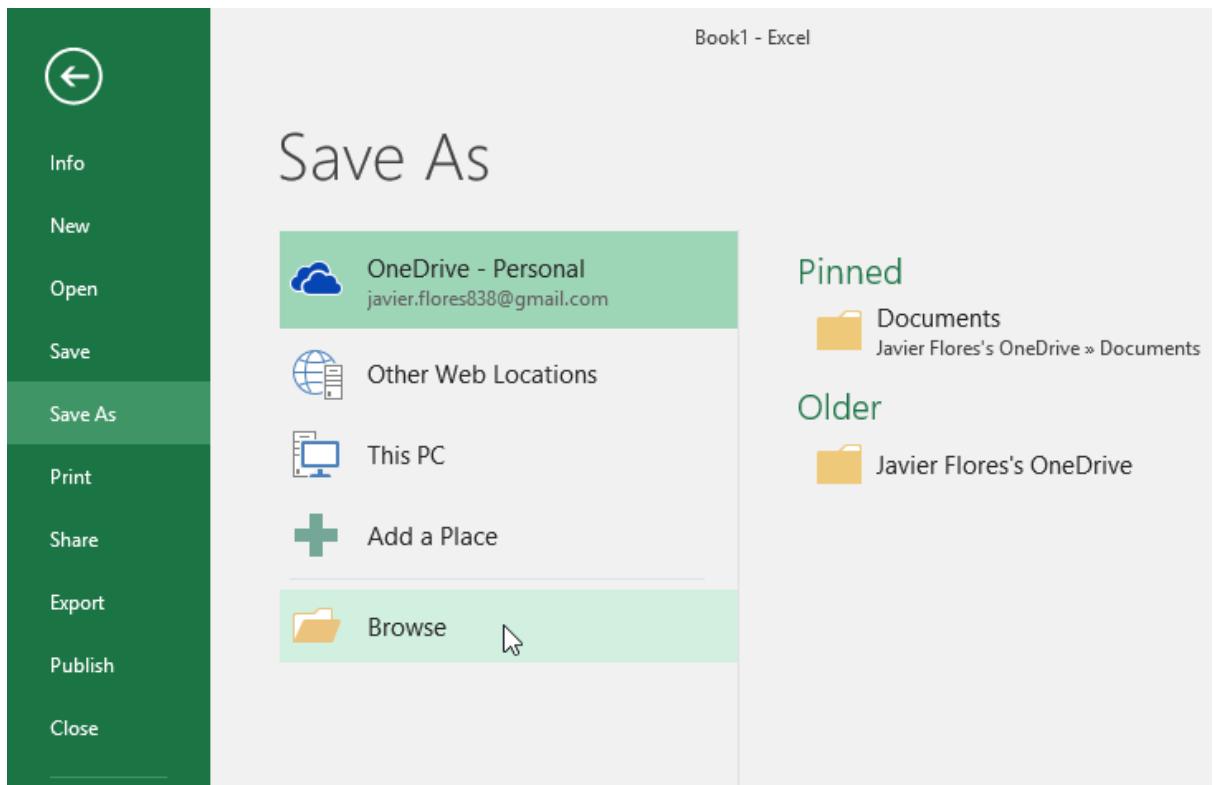
4. The **Save As** dialog box will appear. Select the **location** where you want to save the workbook.

5. Enter a **file name** for the workbook, then click **Save**.
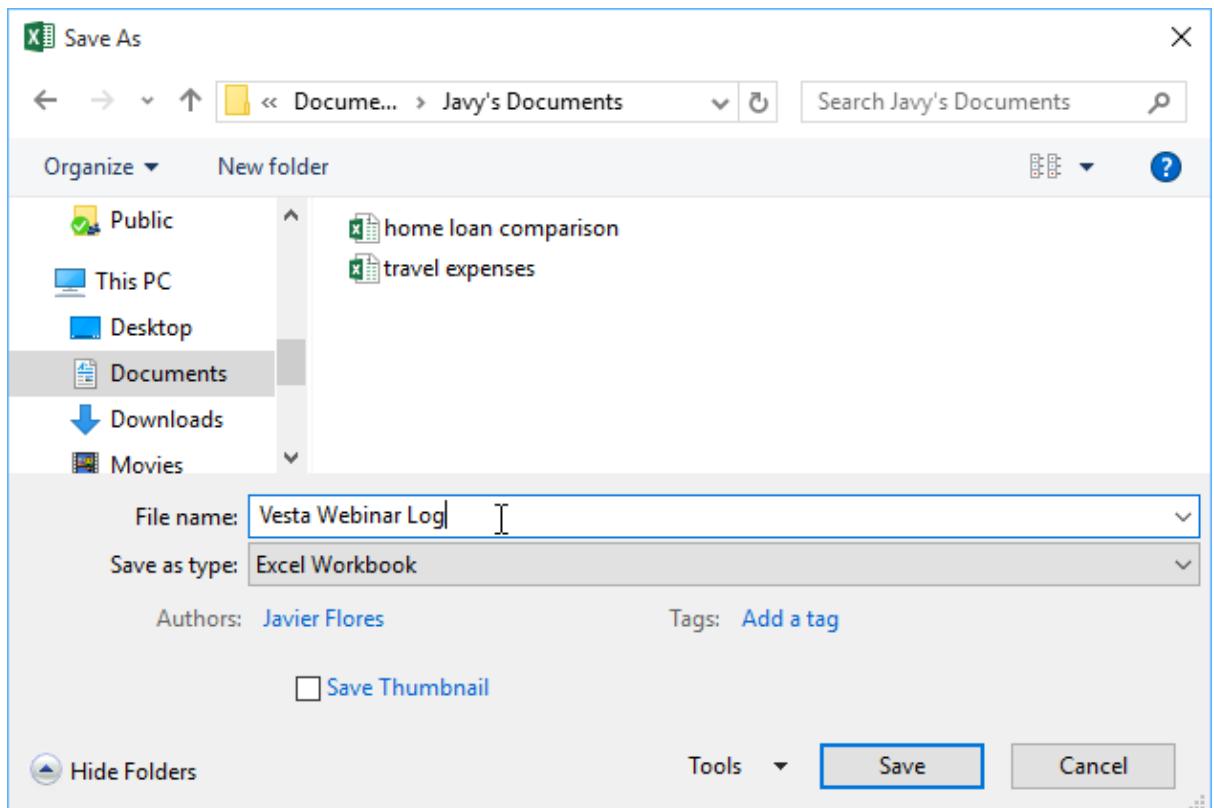
6. The workbook will be **saved**. You can click the **Save** command again to save your changes as you modify the workbook.

You can also access the **Save** command by pressing **Ctrl+S** on your keyboard.

1.8.2. Using Save As to make a copy

If you want to save a **different version** of a workbook while keeping the original, you can create a **copy**. For example, if you have a file named **Sales Data**, you could save it as **Sales Data 2** so you'll be able to edit the new file and still refer back to the original version.

To do this, you'll click the **Save As** command in Backstage view. Just like when saving a file for the first time, you'll need to choose **where to save** the file and give it a new **file name**.
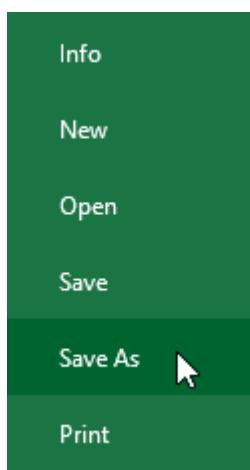
1.8.3. To change the default save location:

If you don't want to use **OneDrive**, you may be frustrated that OneDrive is selected as the default location when saving. If you find it inconvenient to select **Computer** each time, you can change the **default save location** so **Computer** is selected by default.

1. Click the **File** tab to access **Backstage view**.
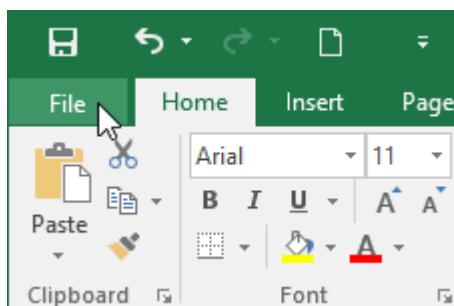
2. Click **Options**.

3. The **Excel Options** dialog box will appear. Select **Save**, **check the box** next to **Save to Computer by default**, then click **OK**. The default save location will be changed.
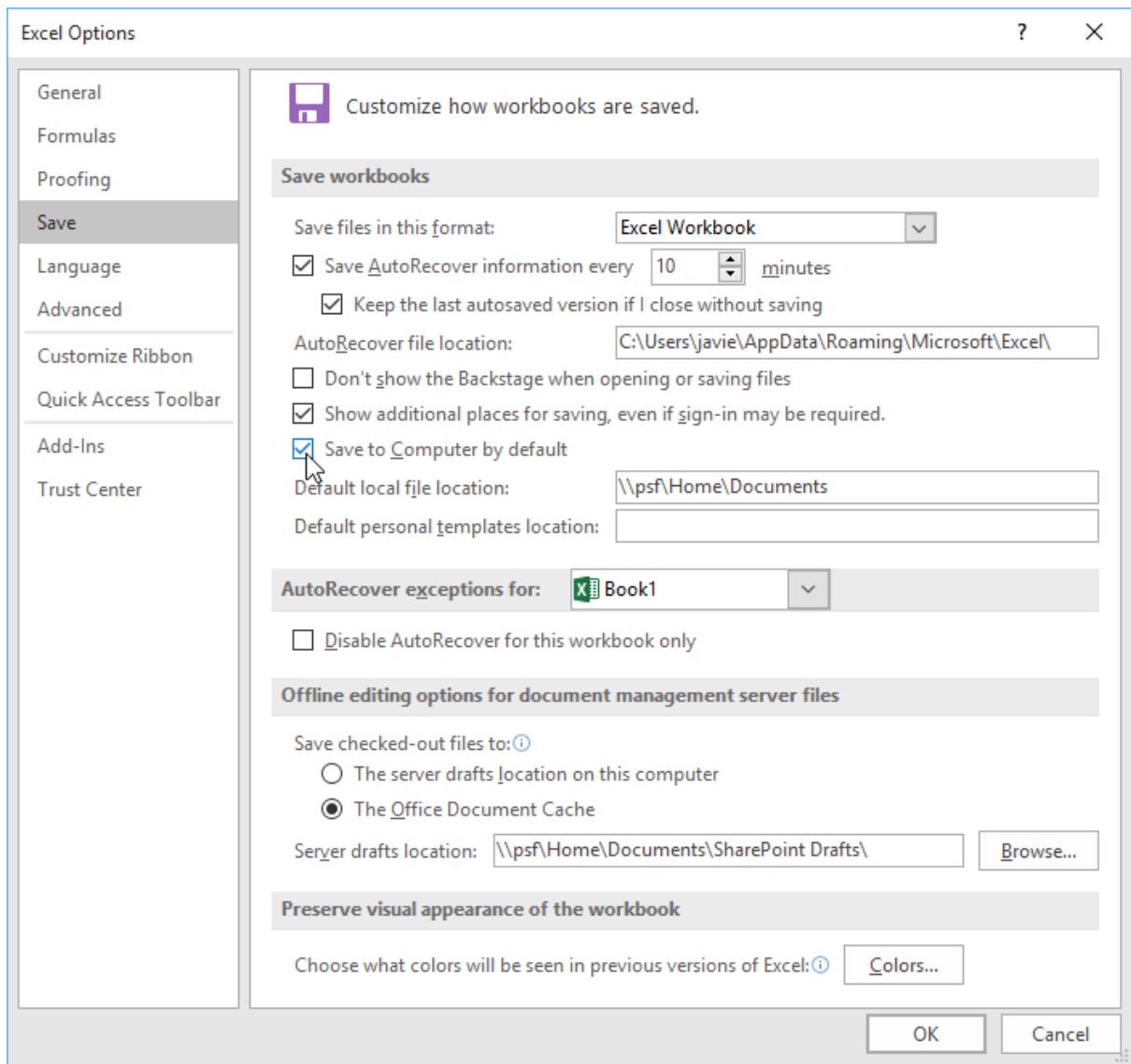
1.8.4. AutoRecover

Excel automatically saves your workbooks to a temporary folder while you are working on them. If you forget to save your changes or if Excel crashes, you can restore the file using **AutoRecover**.

1.8.4.1.   To use AutoRecover:

1. Open Excel. If **autosaved versions** of a file are found, the **Document Recovery** pane will appear.
2. Click to **open** an available file. The workbook will be **recovered**.
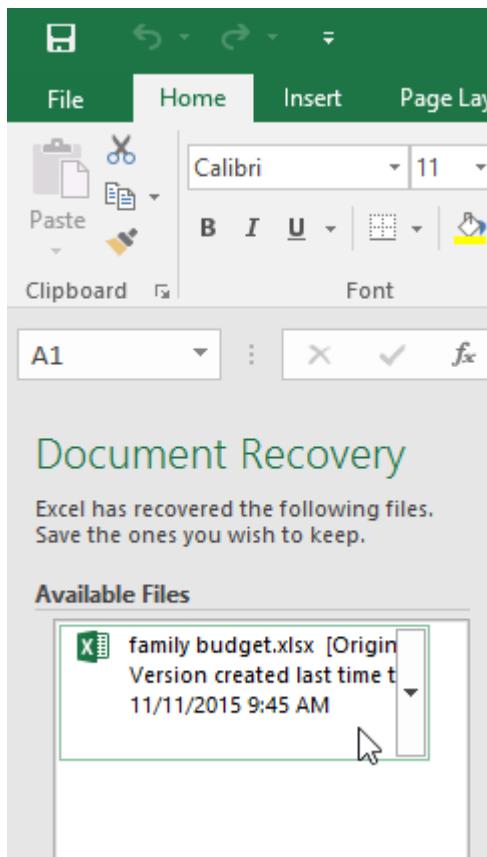
By default, Excel autosaves every 10 minutes. If you are editing a workbook for less than 10 minutes, Excel may not create an autosaved version.

If you don't see the file you need, you can browse all autosaved files from **Backstage view**. Just select the **File** tab, click **Manage Versions,** then choose **Recover Unsaved Workbooks**.
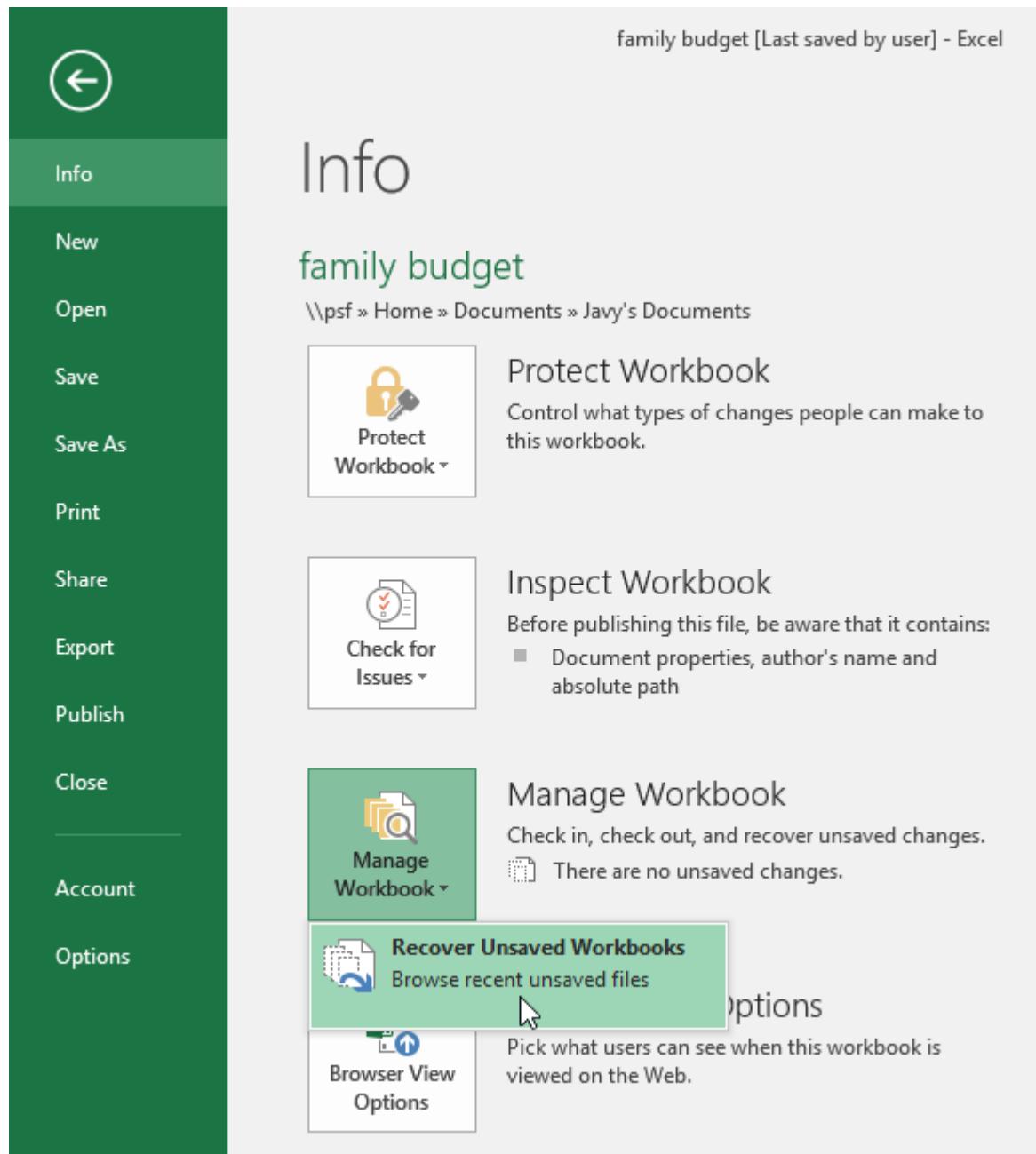
1.8.5. Exporting workbooks

By default, Excel workbooks are saved in the **.xlsx** file type. However, there may be times when you need to use **another file type,** such as a **PDF** or **Excel 97-2003 workbook**. It's easy to **export** your workbook from Excel to a variety of file types.

#### 1.8.5.1. *To export a workbook as a PDF file:*

Exporting your workbook as an **Adobe Acrobat document**, commonly known as a **PDF file**, can be especially useful if you're sharing a workbook with someone who does not have Excel. A PDF will make it possible for recipients to view but not edit the content of your workbook.

1. Click the **File** tab to access **Backstage view**.

2. Click **Export**, then select **Create PDF/XPS**.
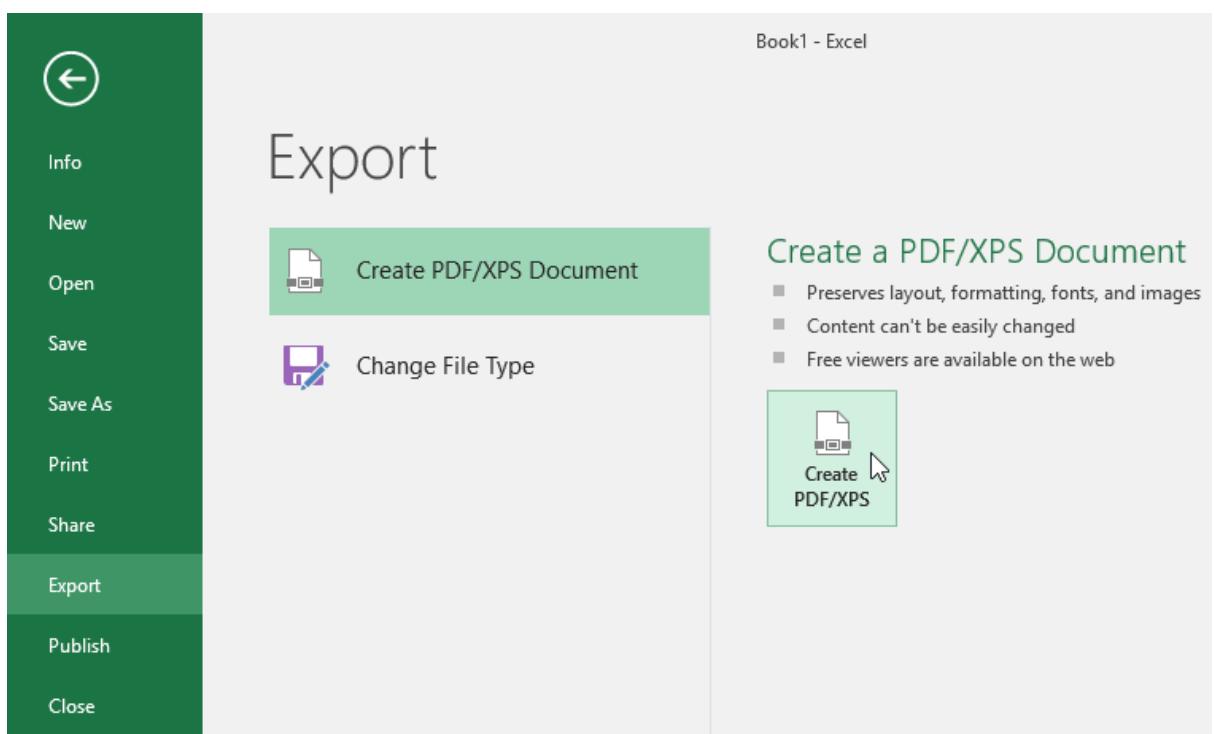
3. The **Save As** dialog box will appear. Select the **location** where you want to export the workbook, enter a **file name**, then click **Publish**.
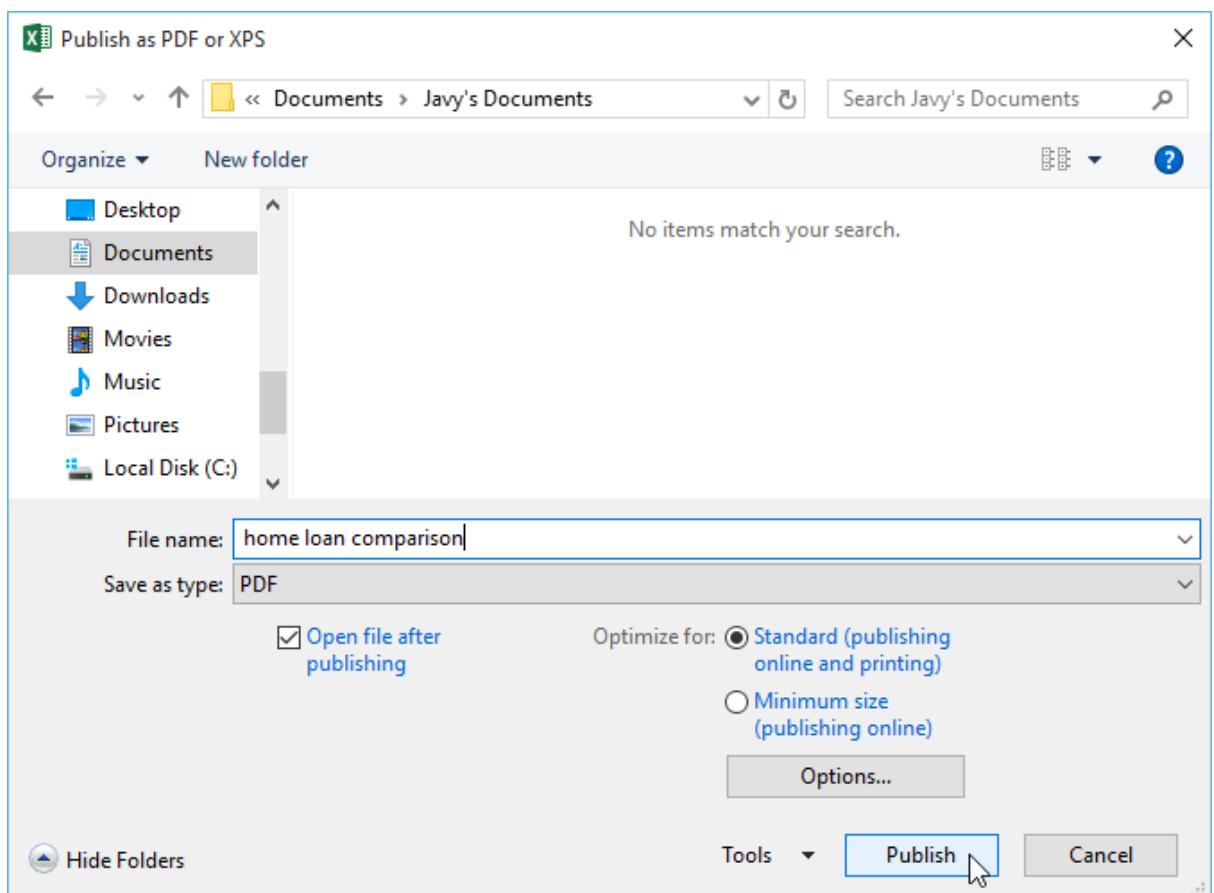
By default, Excel will only export the **active worksheet**. If you have multiple worksheets and want to save all of them in the same PDF file, click **Options** in the **Save As** dialog box. The **Options** dialog box will appear. Select **Entire workbook**, then click **OK**.
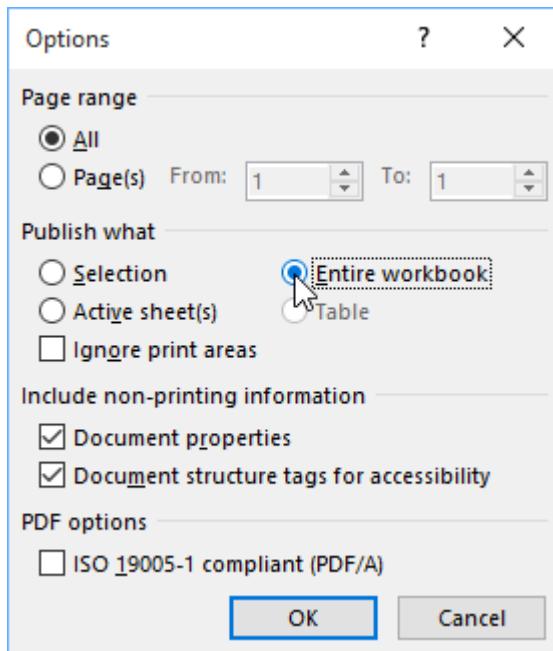

Whenever you export a workbook as a PDF, you'll also need to consider how your workbook data will appear on each **page** of the PDF, just like **printing** a workbook. Visit our Page Layout and Printing lesson to learn more about what to consider before exporting a workbook as a PDF.

1.8.6. To export a workbook to other file types:

You may also find it helpful to export your workbook to other file types, such as an **Excel 97-2003 workbook** if you need to share with people using an older version of Excel, or a **.CSV file** if you need a **plain-text version** of your workbook.

1. Click the **File** tab to access **Backstage view**.
2. Click **Export**, then select **Change File Type**.
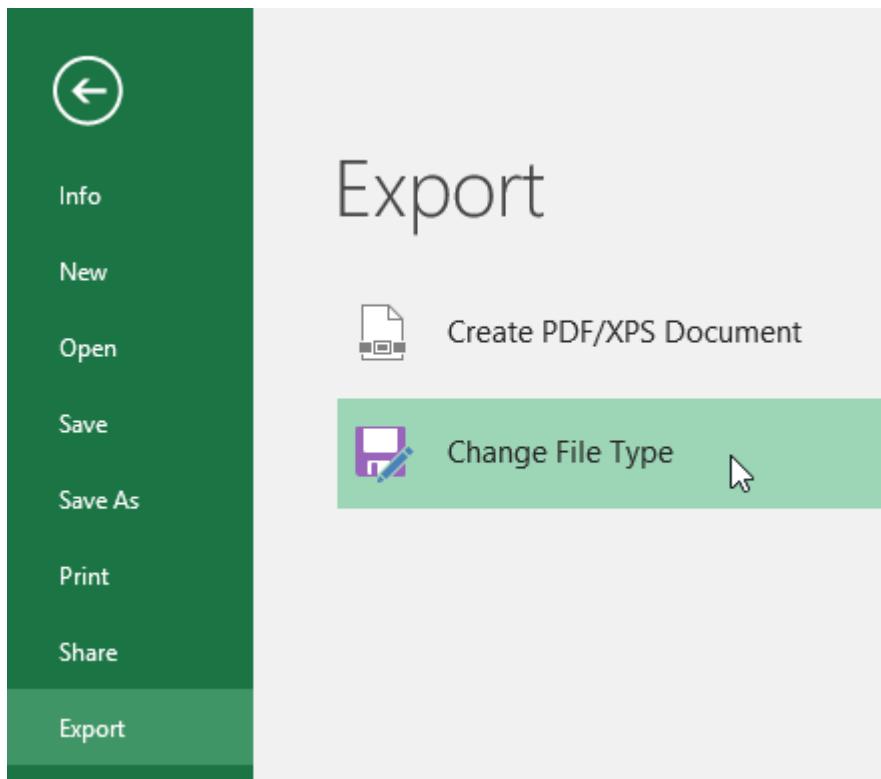
3. Select a common **file type**, then click **Save As**.
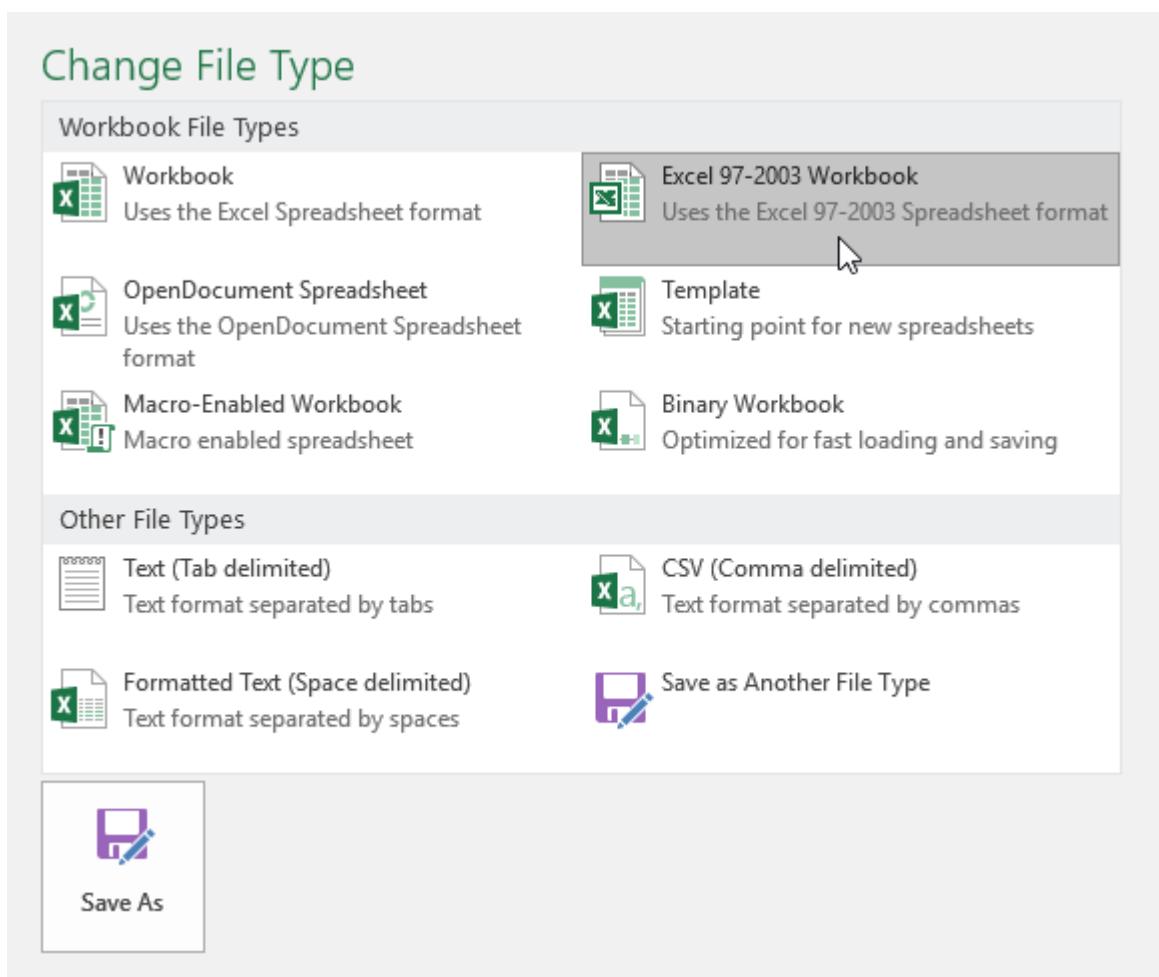
4. The **Save As** dialog box will appear. Select the **location** where you want to export the workbook, enter a **file name**, then click **Save**.
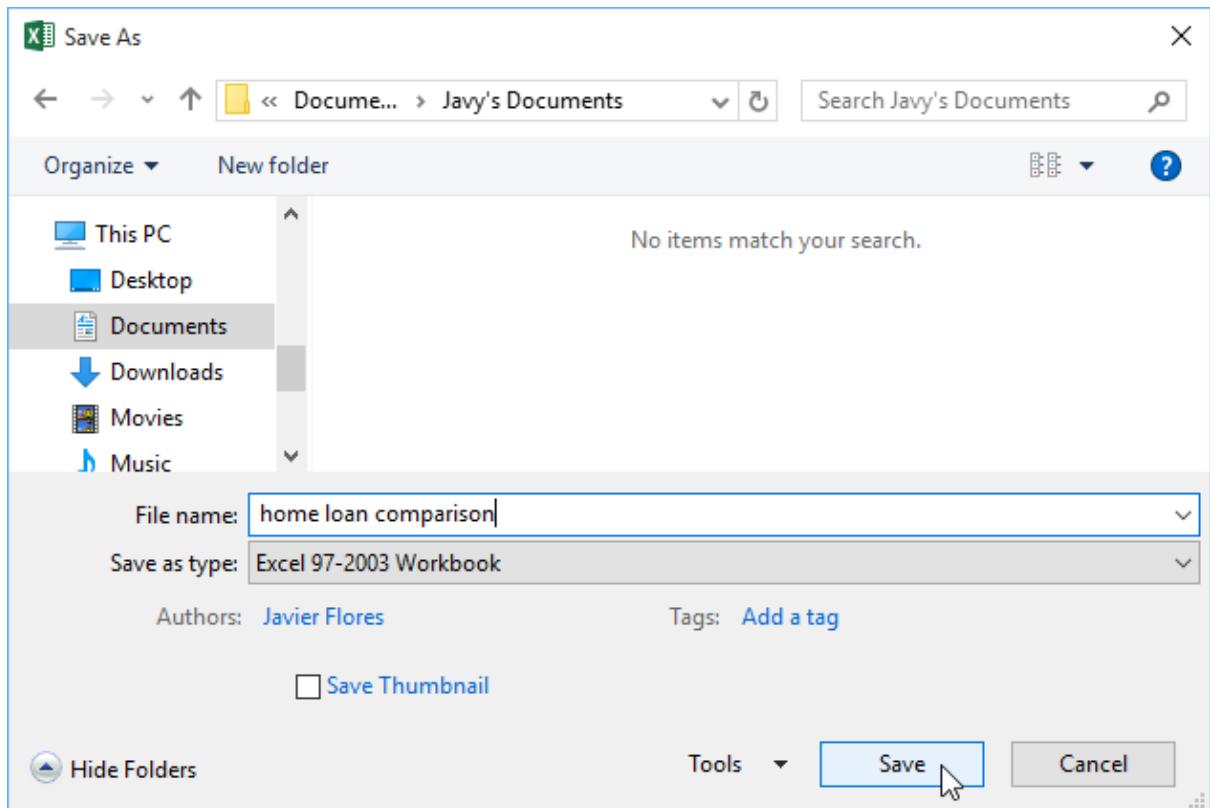
You can also use the **Save as type:** drop-down menu in the **Save As** dialog box to save workbooks in a variety of file types.
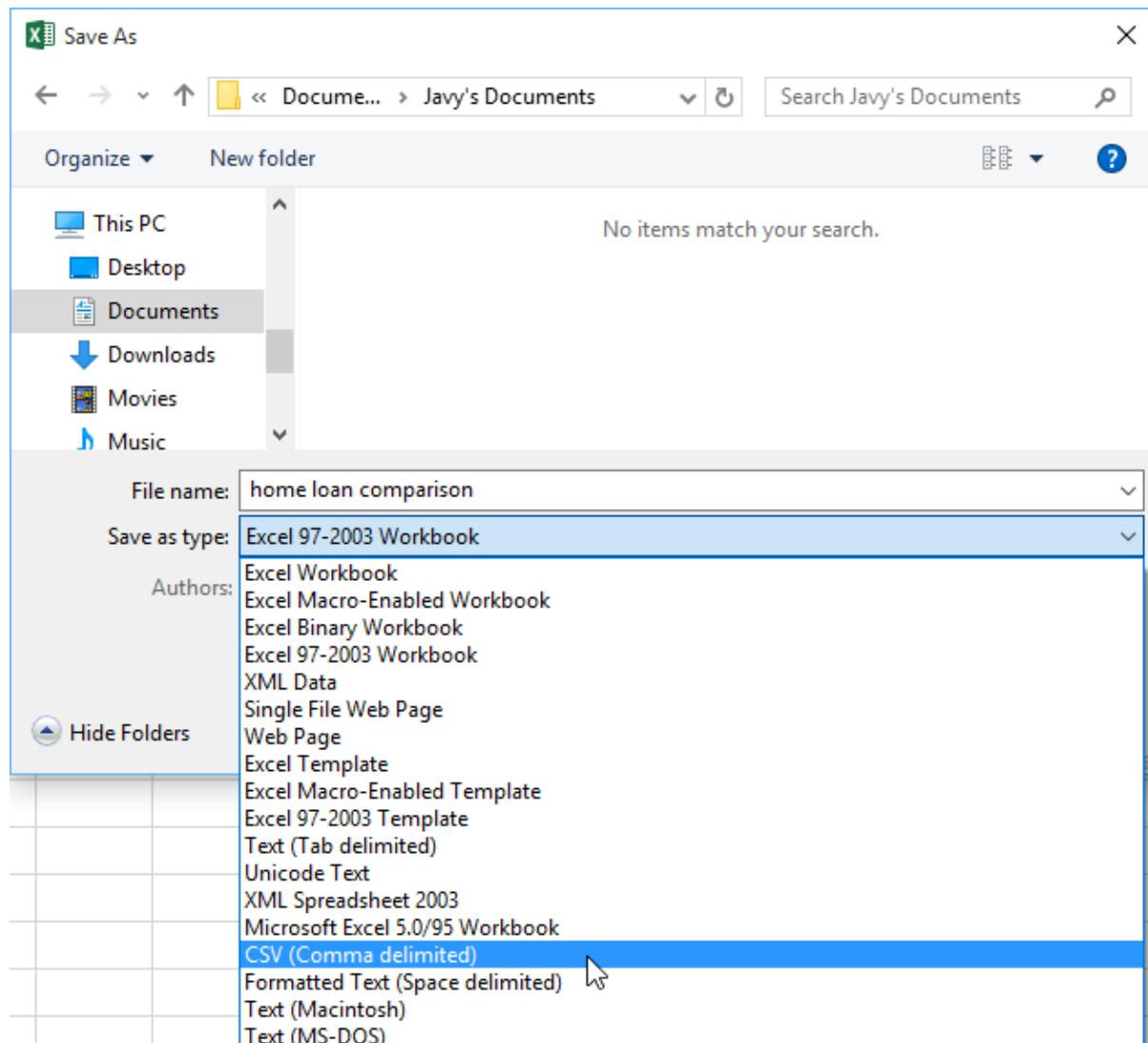
1.9.   Working with Cells and Sheets

1.10.   Introduction

Whenever you work with Excel, you'll enter information—or content—into cells. Cells are the basic building blocks of a worksheet. You'll need to learn the basics of cells and cell content to calculate, analyze, and organize data in Excel.

1.11.   Understanding cells

Every worksheet is made up of thousands of rectangles, which are called **cells**. A cell is the **intersection** of a **row** and a **column**—in other words, where a row and column meet.

Columns are identified by **letters (A, B, C)**, while rows are identified by **numbers (1, 2, 3)**. Each cell has its own **name**—or **cell address**—based on its column and row. In the example below, the selected cell intersects **column C** and **row 5**, so the cell address is **C5**.
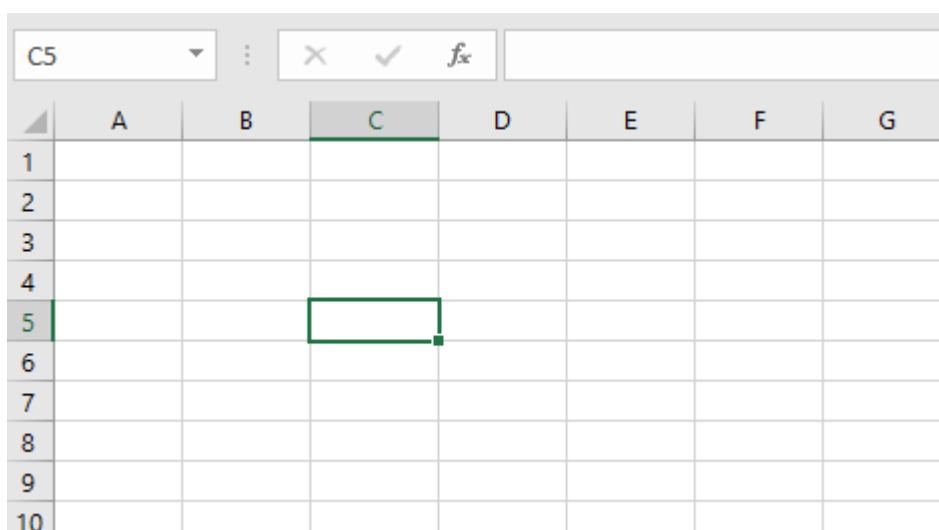
Note that the cell address also appears in the **Name box** in the top-left corner, and that a cell's **column** and **row headings** are **highlighted** when the cell is selected.

You can also select **multiple cells** at the same time. A group of cells is known as a **cell range**. Rather than a single cell address, you will refer to a cell range using the cell addresses of the **first** and **last** cells in the cell range, separated by a **colon**. For example, a cell range that included cells A1, A2, A3, A4, and A5 would be written as **A1:A5**. Take a look at the different cell ranges below:

- Cell range **A1:A8**

- Cell range **A1:F1**

- Cell range **A1:F8**

If the columns in your spreadsheet are labeled with numbers instead of letters, you'll need to change the default **reference style** for Excel.

1.11.1.   To select a cell:

To input or edit cell content, you'll first need to **select** the cell.

1. Click a **cell** to select it. In our example, we'll select cell **D9**.
2. A **border** will appear around the selected cell, and the **column heading** and **row heading** will be highlighted. The cell will remain selected until you click another cell in the worksheet.

You can also select cells using the **arrow keys** on your keyboard.

1.11.2.   To select a cell range:

Sometimes you may want to select a larger group of cells, or a **cell range**.

1. Click and drag the mouse until all of the **adjoining cells** you want to select are **highlighted**. In our example, we'll select the cell range **B5:C18**.
2. Release the mouse to **select** the desired cell range. The cells will remain selected until you click another cell in the worksheet.

1.12. Cell content

Any information you enter into a spreadsheet will be stored in a cell. Each cell can contain different types of **content**, including **text**, **formatting**, **formulas**, and **functions**.

- **Text**: Cells can contain **text**, such as letters, numbers, and dates.
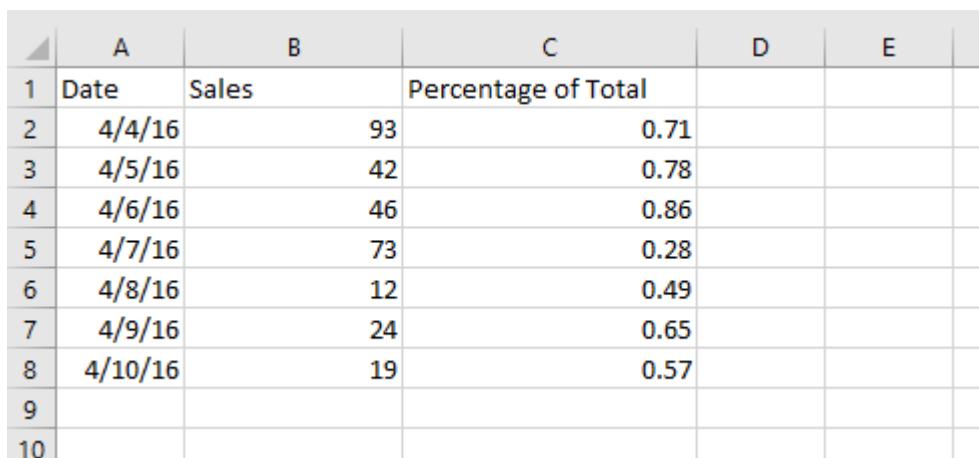
- **Formatting attributes**: Cells can contain **formatting attributes** that change the way letters, numbers, and dates are displayed. For example, percentages can appear as 0.15 or 15%. You can even change a cell's **text** or **background color**.

	A	B	C	D	E
1	Date	Sales	Percentage of Total		
2	April 4, 2016	$93.00	71%		
3	April 5, 2016	$42.00	78%		
4	April 6, 2016	$46.00	86%		
5	April 7, 2016	$73.00	28%		
6	April 8, 2016	$12.00	49%		
7	April 9, 2016	$24.00	65%		
8	April 10, 2016	$19.00	57%		
9					
10					

- **Formulas and functions**: Cells can contain **formulas** and **functions** that calculate cell values. In our example, **SUM(B2:B8)** adds the value of each cell in the cell range B2:B8 and displays the total in cell B9.

B9   ▼   ⋮   ✕   ✓   *fx*   =SUM(B2:B8)

	A	B	C	D	E
1	Date	Sales	Percentage of Total		
2	April 4, 2016	$93.00	71%		
3	April 5, 2016	$42.00	78%		
4	April 6, 2016	$46.00	86%		
5	April 7, 2016	$73.00	28%		
6	April 8, 2016	$12.00	49%		
7	April 9, 2016	$24.00	65%		
8	April 10, 2016	$19.00	57%		
9	Weekly Sales	$309.00			
10					

1.12.1.　　　To insert content:

1. Click a **cell** to select it. In our example, we'll select cell **F9**.

	A	B	C	D	E	F	G	H
	Department	**First Name**	**Last Name**	**User Name**	**Part 1**	**Part 2**		**Part 3**
5	Sales	Walter	Rivera	wrivera	X	X	On hold	X
6	Sales	Heidi	Lee		X	X	On hold	
7	Claims	Josie	Gates		X	X		X
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X			X
10	Sales	Walter	Rivera		X			X
11	Claims	Misty	Whitfield		X			

2. Type something into the selected cell, then press **Enter** on your keyboard. The content will appear in the **cell** and the **formula bar**. You can also input and edit cell content in the formula bar.

	A	B	C	D	E	F	G	H
	Department	**First Name**	**Last Name**	**User Name**	**Part 1**	**Part 2**		**Part 3**
5	Sales	Walter	Rivera	wrivera	X	X	On hold	X
6	Sales	Heidi	Lee		X	X	On hold	
7	Claims	Josie	Gates		X	X		X
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X		X
10	Sales	Walter	Rivera		X			X
11	Claims	Misty	Whitfield		X			

1.12.2.　　　To delete (or clear) cell content:

1. Select the **cell(s)** with content you want to delete. In our example, we'll select the cell range **A10:H10**.

2. Select the **Clear** command on the **Home** tab, then click **Clear Contents**.

3. The cell contents will be deleted.

You can also use the **Delete** key on your keyboard to delete content from **multiple cells** at once. The **Backspace** key will only delete content from one cell at a time.

1.12.3. To delete cells:

There is an important difference between deleting the content of a cell and **deleting the cell itself**. If you delete the entire cell, the cells below it will **shift to fill in the gaps** and **replace the deleted cells**.

1. Select the **cell(s)** you want to delete. In our example, we'll select **A10:H10**.

2. Select the **Delete** command from the **Home** tab on the **Ribbon**.
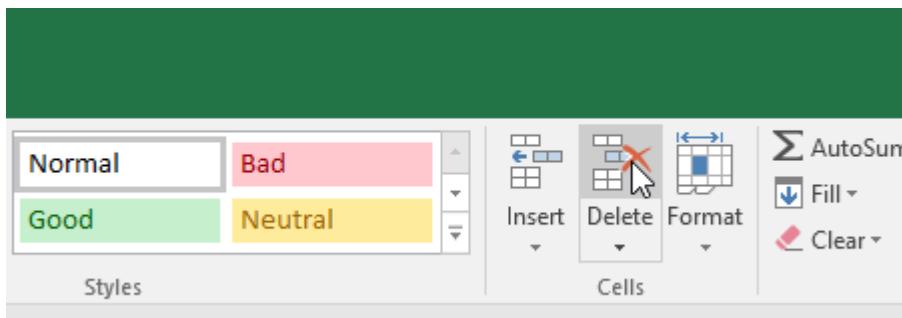
3. The cells below will **shift up** and **fill in the gaps**.

	Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
4	Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
5	Sales	Walter	Rivera	wrivera	X	X	On hold	X
6	Sales	Heidi	Lee		X	X	On hold	
7	Claims	Josie	Gates		X	X		X
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X		X
10	Claims	Misty	Whitfield		X			
11	Marketing	Matilda	Lewis		X			
12	Accounting	Elizabeth	Hicks		X			X
13	HR	Alvin	Rios		X			
14	HR	Brian	Gaines		X			

1.12.4. To copy and paste cell content:

Excel allows you to **copy** content that is already entered into your spreadsheet and **paste** that content to other cells, which can save you time and effort.

1. Select the **cell(s)** you want to **copy**. In our example, we'll select **F9**.

2. Click the **Copy** command on the **Home** tab, or press **Ctrl+C** on your keyboard.
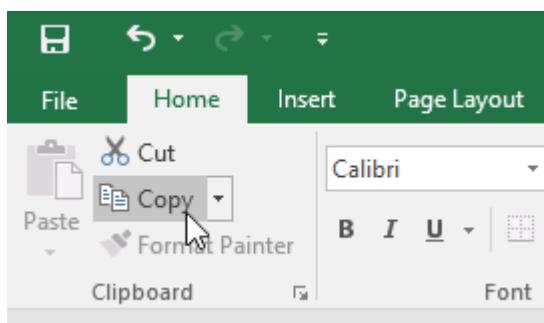
3. Select the **cell(s)** where you want to **paste** the content. In our example, we'll select **F12:F17**. The copied cell(s) will have a **dashed box** around them.

Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
Sales	Walter	Rivera	wrivera	X	X	On hold	X
Sales	Heidi	Lee		X	X	On hold	
Claims	Josie	Gates		X	X		X
Accounting	Wendy	Crocker		X	X		
Accounting	Loretta	Johnson		X	X		X
Claims	Misty	Whitfield		X			
Marketing	Matilda	Lewis		X			
Accounting	Elizabeth	Hicks		X			X
HR	Alvin	Rios		X			
HR	Brian	Gaines		X			
Sales	Megan	Bosworth		X			
Claims	Maria	Menzies		X			
Claims	Micheal	Russell		X			

4. Click the **Paste** command on the **Home** tab, or press **Ctrl+V** on your keyboard.
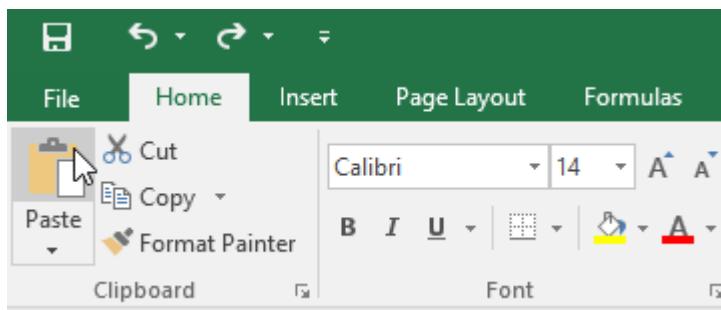
5. The content will be **pasted** into the selected cells.

	A	B	C	D	E	F	G	H
					Part 1	Part 2		Part 3
4	Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
5	Sales	Walter	Rivera	wrivera	X	X	On hold	X
6	Sales	Heidi	Lee		X	X	On hold	
7	Claims	Josie	Gates		X	X		X
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X		X
10	Claims	Misty	Whitfield		X			
11	Marketing	Matilda	Lewis		X			
12	Accounting	Elizabeth	Hicks		X	X		X
13	HR	Alvin	Rios		X	X		
14	HR	Brian	Gaines		X	X		
15	Sales	Megan	Bosworth		X	X		
16	Claims	Maria	Menzies		X	X		
17	Claims	Micheal	Russell		X	X		

1.12.5.   To access more paste options:

You can also access **additional paste options**, which are especially convenient when working with cells that contain **formulas** or **formatting**. Just click the **drop-down arrow** on the **Paste** command to see these options.

43
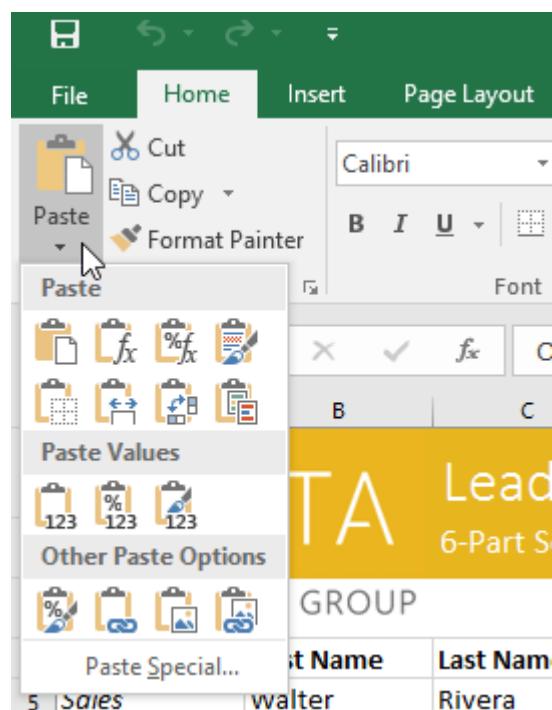
Instead of choosing commands from the Ribbon, you can access commands quickly by **right-clicking**. Simply select the **cell(s)** you want to **format**, then right-click the mouse. A **drop-down menu** will appear, where you'll find several **commands** that are also located on the Ribbon.
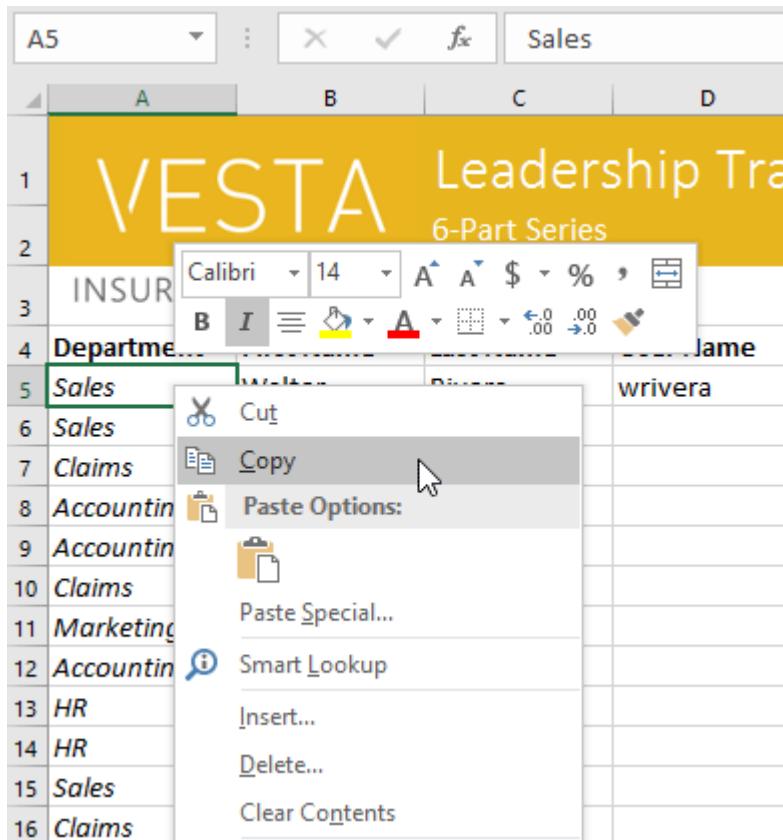
1.12.6.   To cut and paste cell content:

Unlike copying and pasting, which **duplicates** cell content, **cutting** allows you to **move** content between cells.

1. Select the **cell(s)** you want to **cut**. In our example, we'll select **G5:G6**.
2. Right-click the mouse and select the **Cut** command. Alternatively, you can use the command on the **Home** tab, or press **Ctrl+X** on your keyboard.

3. Select the cells where you want to **paste** the content. In our example, we'll select **F10:F11**. The cut cells will now have a **dashed box** around them.
4. Right-click the mouse and select the **Paste** command. Alternatively, you can use the command on the **Home** tab, or press **Ctrl+V** on your keyboard.

5. The cut content will be **removed** from the original cells and **pasted** into the selected cells.

	Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
4	Department	First Name	Last Name	User Name	Part 1	Part 2		Part 3
5	Sales	Walter	Rivera	wrivera	X	X		X
6	Sales	Heidi	Lee		X	X		
7	Claims	Josie	Gates		X	X		X
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X		X
10	Claims	Misty	Whitfield		X	On hold		
11	Marketing	Matilda	Lewis		X	On hold		
12	Accounting	Elizabeth	Hicks		X	X		X
13	HR	Alvin	Rios		X	X		
14	HR	Brian	Gaines		X	X		
15	Sales	Megan	Bosworth		X	X		
16	Claims	Maria	Menzies		X	X		
17	Claims	Micheal	Russell		X	X		

1.12.7.   To drag and drop cells:

Instead of cutting, copying, and pasting, you can **drag and drop** cells to move their contents.

1. Select the **cell(s)** you want to **move**. In our example, we'll select **H4:H12**.
2. Hover the mouse over the **border** of the selected cell(s) until the mouse changes to a **pointer with four arrows**.

3. Click and drag the cells to the **desired location**. In our example, we'll move them to **G4:G12**.

4. Release the mouse. The cells will be **dropped** in the selected location.

1.12.8. To use the fill handle:

If you're copying cell content to adjacent cells in the same row or column, the **fill handle** is a good alternative to the copy and paste commands.

1. Select the **cell(s)** containing the content you want to use, then hover the mouse over the lower-right corner of the cell so the **fill handle** appears.

2. Click and drag the **fill handle** until all of the cells you want to fill are selected. In our example, we'll select **G13:G17**.

	A	B	C	D	E	F	G	H
1	VESTA		Leadership Training					
2			6-Part Series					
3	INSURANCE GROUP							
4	**Department**	**First Name**	**Last Name**	**User Name**	**Part 1**	**Part 2**	**Part 3**	
5	Sales	Walter	Rivera	wrivera	X	X	X	
6	Sales	Heidi	Lee		X	X		
7	Claims	Josie	Gates		X	X	X	
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X	X	
10	Claims	Misty	Whitfield		X	On hold		
11	Marketing	Matilda	Lewis		X	On hold		
12	Accounting	Elizabeth	Hicks		X	X	X	
13	HR	Alvin	Rios		X	X		
14	HR	Brian	Gaines		X	X		
15	Sales	Megan	Bosworth		X	X		
16	Claims	Maria	Menzies		X	X		
17	Claims	Micheal	Russell		X	X		
18								
19								

3. Release the mouse to **fill** the selected cells.

	A	B	C	D	E	F	G	H
1	VESTA		Leadership Training					
2			6-Part Series					
3	INSURANCE GROUP							
4	**Department**	**First Name**	**Last Name**	**User Name**	**Part 1**	**Part 2**	**Part 3**	
5	Sales	Walter	Rivera	wrivera	X	X	X	
6	Sales	Heidi	Lee		X	X		
7	Claims	Josie	Gates		X	X	X	
8	Accounting	Wendy	Crocker		X	X		
9	Accounting	Loretta	Johnson		X	X	X	
10	Claims	Misty	Whitfield		X	On hold		
11	Marketing	Matilda	Lewis		X	On hold		
12	Accounting	Elizabeth	Hicks		X	X	X	
13	HR	Alvin	Rios		X	X	X	
14	HR	Brian	Gaines		X	X	X	
15	Sales	Megan	Bosworth		X	X	X	
16	Claims	Maria	Menzies		X	X	X	
17	Claims	Micheal	Russell		X	X	X	
18								
19								

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1.12.9.   To continue a series with the fill handle:

The fill handle can also be used to **continue a series**. Whenever the content of a row or column follows a sequential order, like **numbers (1, 2, 3)** or **days (Monday, Tuesday, Wednesday)**, the fill handle can guess what should come next in the series. In most cases, you will need to select **multiple cells** before using the fill handle to help Excel determine the series order. Let's take a look at an example:

1. Select the cell range that contains the series you want to continue. In our example, we'll select **E4:G4**.
2. Click and drag the fill handle to continue the series.

3. Release the mouse. If Excel understood the series, it will be continued in the selected cells. In our example, Excel added **Part 4**, **Part 5**, and **Part 6** to **H4:J4**.

You can also **double-click** the fill handle instead of clicking and dragging. This can be useful with larger spreadsheets, where clicking and dragging may be awkward.

Watch the video below to see an example of double-clicking the fill handle.

1.13. Modifying Columns, Rows, and Cells

By default, every row and column of a new workbook is set to the same **height** and **width**. Excel allows you to modify column width and row height in different ways, including **wrapping text** and **merging cells**.

1.13.1. To modify column width:

In our example below, column C is too narrow to display all of the content in these cells. We can make all of this content visible by changing the **width** of column C.

1. Position the mouse over the **column line** in the **column heading** so the cursor becomes a **double arrow**.

2. Click and drag the mouse to **increase** or **decrease** the column width.

3. Release the mouse. The **column width** will be changed.

With numerical data, the cell will display **pound signs** (#######) if the column is too narrow. Simply **increase the column width** to make the data visible.

1.13.2.   To AutoFit column width:

The **AutoFit** feature will allow you to set a column's width to fit its content **automatically**.

1. Position the mouse over the **column line** in the **column heading** so the cursor becomes a **double arrow**.

2. Double-click the mouse. The **column width** will be changed automatically to fit the content.

You can also AutoFit the width for several columns at the same time. Simply select the columns you want to AutoFit, then select the **AutoFit Column Width** command from the **Format** drop-down menu on the **Home** tab. This method can also be used for **row height**.

1.13.3. To modify row height:

1. Position the **cursor** over the **row line** so the cursor becomes a **double arrow**.

2. Click and drag the mouse to **increase** or **decrease** the row height.

3. Release the mouse. The **height** of the selected row will be changed.

1.13.4.   To modify all rows or columns:

Instead of resizing rows and columns individually, you can modify the height and width of every row and column at the same time. This method allows you to set a **uniform size** for every row and column in your worksheet. In our example, we will set a **uniform row height**.

1. Locate and click the **Select All** button just below the **name box** to select every cell in the worksheet.

2. Position the mouse over a **row line** so the cursor becomes a **double arrow**.
3. Click and drag the mouse to **increase** or **decrease** the row height, then release the mouse when you are satisfied. The row height will be changed for the entire worksheet.

1.13.5. Inserting, deleting, moving, and hiding

After you've been working with a workbook for a while, you may find that you want to **insert new** columns or rows, **delete** certain rows or columns, **move** them to a different location in the worksheet, or even **hide** them.

1.13.6. To insert rows:

1. Select the **row heading** below where you want the new row to appear. In this example, we want to insert a row between rows 4 and 5, so we'll select **row 5**.

2. Click the **Insert** command on the **Home** tab.

3. The **new row** will appear **above** the selected row.

When inserting new rows, columns, or cells, you will see a **paintbrush icon** next to the inserted cells. This button allows you to choose how Excel formats these cells. By default, Excel formats inserted rows with the same formatting as the cells in the row above. To access more options, hover your mouse over the icon, then click the **drop-down arrow**.

1.13.7. To insert columns:

1. Select the **column heading** to the right of where you want the new column to appear. For example, if you want to insert a column between columns D and E, select **column E**.

D	E	F
PHONE	EMAIL ADDRESS	
605-555-6435	jake@adventureoutfitters.com	
603-555-2460	katie.stark@ariarealestate.com	
913-555-5928	yuenp@corepharmaceuticals.com	
316-555-3256	felicia@everlypublishing.com	
575-555-9255	mlawson@massairlines.com	
360-555-5422	info@newhaventraders.com	
605-555-4495	jtorrance@overlookinn.com	

2. Click the **Insert** command on the **Home** tab.
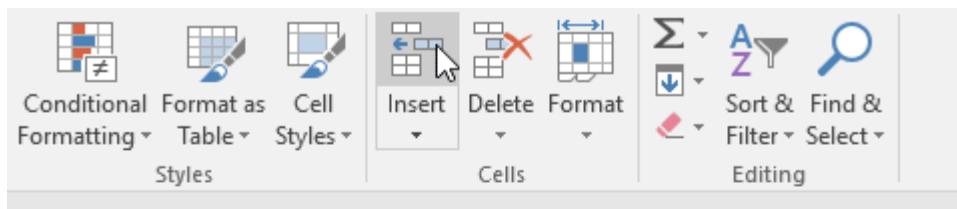
D	E	F
PHONE	EMAIL ADDRESS	
605-555-6435	jake@adventureoutfitters.com	
603-555-2460	katie.stark@ariarealestate.com	

3. The **new column** will appear **to the left** of the selected column.
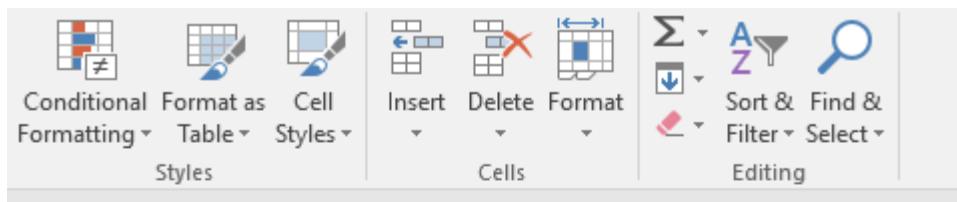
When inserting rows and columns, make sure you select the entire row or column by clicking the **heading.** If you select only a cell in the row or column, the **Insert** command will only insert a new cell.

1.13.8.   To delete a row or column:

It's easy to delete a row or column that you no longer need. In our example we'll delete a row, but you can delete a column the same way.

1. Select the **row** you want to delete. In our example, we'll select **row 9**.

7	Everly Publishing	Felicia Reyes	8544 Lazy Bluff Ave Whiskey Creek, KS 66689
8	Mass Airlines	Miranda Lawson	5316 Colonial Pkwy Esterhazy, NM 88431
9	Newhaven Traders	Rick Chaturvedi	2428 S Redding St #2 Bogg's Corner, WA 98175
10	Overlook Inn	Jill Torrance	3160 Amber Gate Rd Rodney Village, SD 57324
11	Riley Garden Supply	Vivica da Silva	8595 Thunder Brook Cir Gravity, WA 99304

Sheet 1   ⊕

Ready

2. Click the **Delete** command on the **Home** tab.
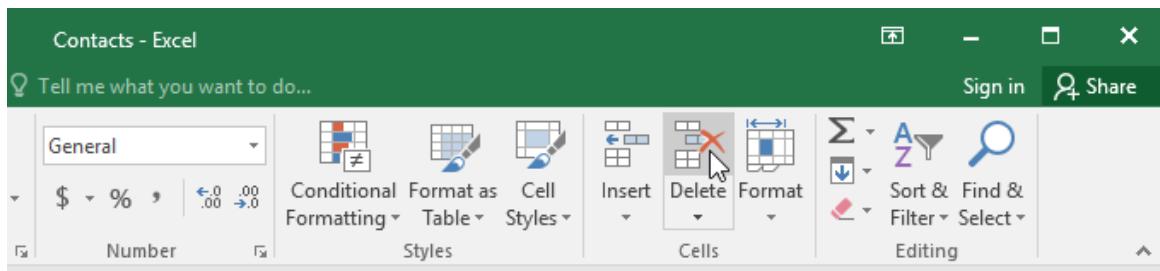
3. The **selected row** will be deleted, and those around it will **shift**. In our example, **row 10** has moved up, so it's now **row 9**.

It's important to understand the difference between **deleting** a row or column and simply **clearing its contents**. If you want to remove the **content** from a row or column without causing others to shift, **right-click a heading**, then select **Clear Contents** from the drop-down menu.

1.13.9. To move a row or column:

Sometimes you may want to **move** a column or row to rearrange the content of your worksheet. In our example we'll move a column, but you can move a row in the same way.

1. Select the desired **column heading** for the column you want to move.

2. Click the **Cut** command on the **Home** tab, or press **Ctrl+X** on your keyboard.
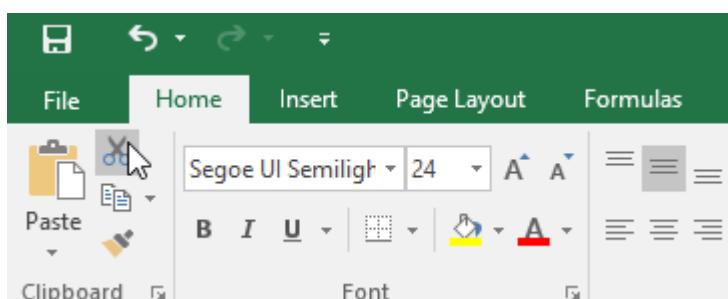
3. Select the **column heading** to the right of where you want to move the column. For example, if you want to move a column between columns E and F, select **column F**.

|	C	D	E	↓ F
	BILLING ADDRESS	PHONE	FAX	EMAIL ADDRESS
	1407 Dusty Fawn Ln Soaptown, SD 57696	605-555-6435		jake@adventureoutfitte
	971 Cinder Butterfly St Stoughton, NH 03204	603-555-2460		katie.stark@ariarealesta
	5108 Crystal Gate Blvd Twig City, KS 66208	913-555-5928		yuenp@corepharmaceu
	8544 Lazy Bluff Ave Whiskey Creek, KS 66689	316-555-3256		felicia@everlypublishin
	5316 Colonial Pkwy Esterhazy, NM 88431	575-555-9255		mlawson@massairlines

4. Click the **Insert** command on the **Home** tab, then select **Insert Cut Cells** from the drop-down menu.

5. The column will be **moved** to the selected location, and the columns around it will shift.

You can also access the **Cut** and **Insert** commands by right-clicking the mouse and selecting the **desired commands** from the drop-down menu.
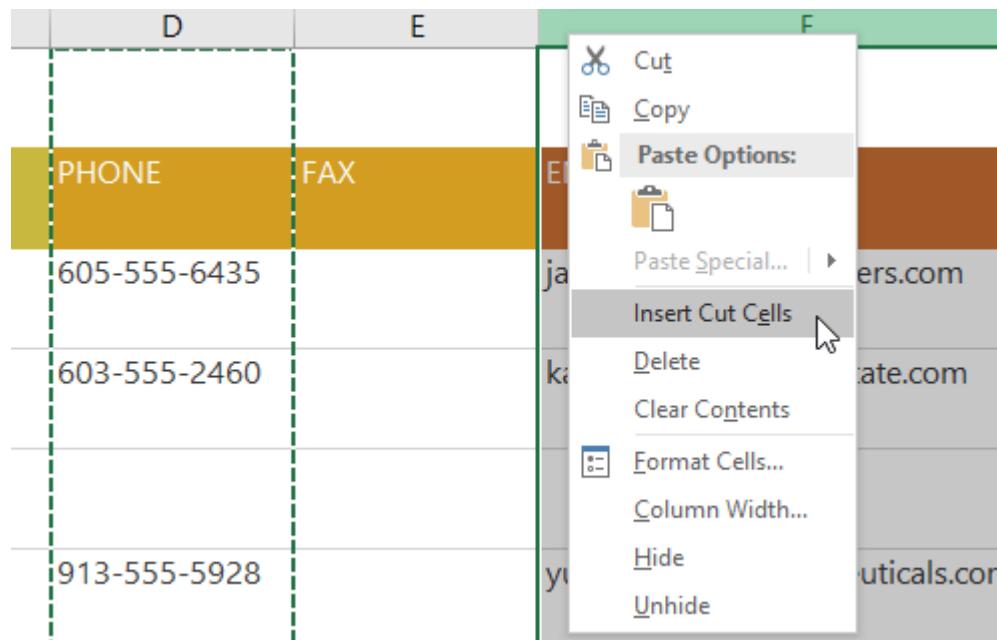
1.13.10.   To hide and unhide a row or column:

At times, you may want to **compare** certain rows or columns without changing the organization of your worksheet. To do this, Excel allows you to **hide** rows and columns as needed. In our example we'll hide a few columns, but you can hide rows in the same way.

1. Select the **columns** you want to **hide**, right-click the mouse, then select **Hide** from the **formatting** menu. In our example, we'll hide columns C, D, and E.

2. The columns will be **hidden**. The **green column line** indicates the location of the hidden columns.

3. To **unhide** the columns, select the columns on **both sides** of the hidden columns. In our example, we'll select columns **B** and **F**. Then right-click the mouse and select **Unhide** from the **formatting** menu.

4. The hidden columns will reappear.

1.14.   Wrapping text and merging cells

Whenever you have too much cell content to be displayed in a single cell, you may decide to **wrap the text** or **merge** the cell rather than resize a column. Wrapping the text will automatically modify a cell's **row height**, allowing cell contents to be displayed **on multiple lines**. Merging allows you to combine a cell with adjacent empty cells to create **one large cell**.

1.14.1.   To wrap text in cells:

1. Select the cells you want to wrap. In this example, we'll select the cells in **column C**.

2. Click the **Wrap Text** command on the **Home** tab.

3. The text in the selected cells will be **wrapped**.

Click the **Wrap Text** command again to **unwrap** the text.

1.14.2.   To merge cells using the Merge & Center command:

1. Select the **cell range** you want to merge. In our example, we'll select **A1:F1**.
2. Click the **Merge & Center** command on the **Home** tab. In our example, we'll select the cell range **A1:F1**.

3. The selected cells will be **merged**, and the text will be **centered**.

1.14.3. To access more merge options:

If you click the drop-down arrow next to the **Merge & Center** command on the **Home** tab, the **Merge** drop-down menu will appear.
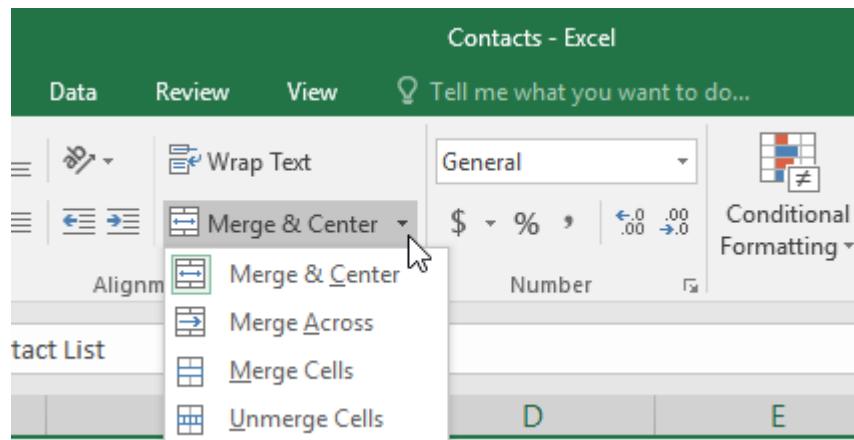
From here, you can choose to:

- **Merge & Center**: merges the selected cells into **one cell** and **centers** the text
- **Merge Across**: merges the selected cells into **larger cells** while keeping each **row** separate
- **Merge Cells**: merges the selected cells into one cell but **does not cente**r the text
- **Unmerge Cells**: unmerges selected cells

You'll want to be careful when using this feature. If you merge multiple cells that all contain data, Excel will keep only the contents of the upper-left cell and discard everything else.

1.14.4. To center across selection:

Merging can be useful for organizing your data, but it can also create problems later on. For example, it can be difficult to move, copy, and paste content from merged cells. A good alternative to merging is **Center Across Selection**, which creates a similar effect without actually combining cells.

Watch the video below to learn why you should use Center Across Selection instead of merging cells.

1. Select the desired cell range. In our example, we'll select **A1:F1**. **Note**: If you already merged these cells, you should **unmerge them** before continuing to step 2.
2. Click the **small arrow** in the lower-right corner of the **Alignment** group on the **Home** tab.

3. A dialog box will appear. Locate and select the **Horizontal** drop-down menu, select **Center Across Selection**, then click **OK**.
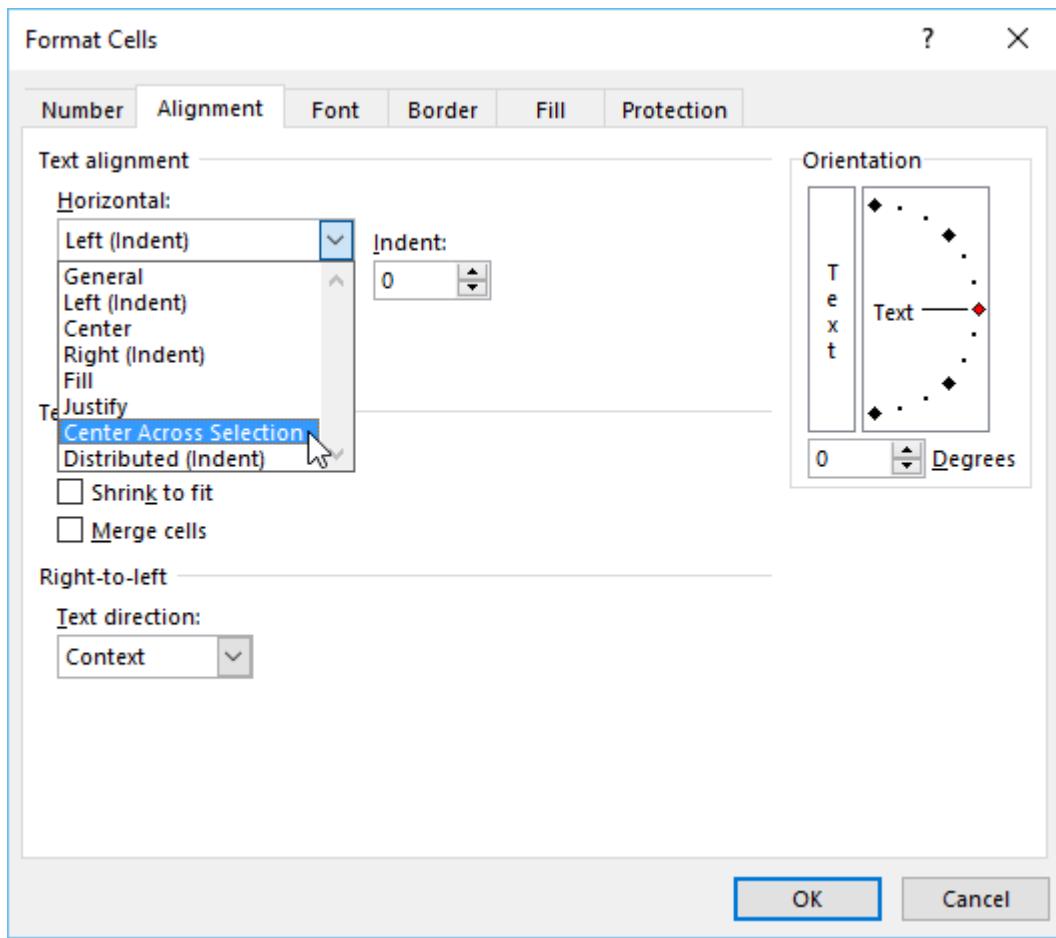
4. The content will be centered across the selected cell range. As you can see, this creates the same visual result as merging and centering, but it preserves each cell within A1:F1.

1.15.   Formatting Cells

All cell content uses the same **formatting** by default, which can make it difficult to read a workbook with a lot of information. Basic formatting can customize the **look and feel** of your workbook, allowing you to draw attention to specific sections and making your content easier to view and understand.

1.15.1.   To change the font size:

1. Select the **cell(s)** you want to modify.
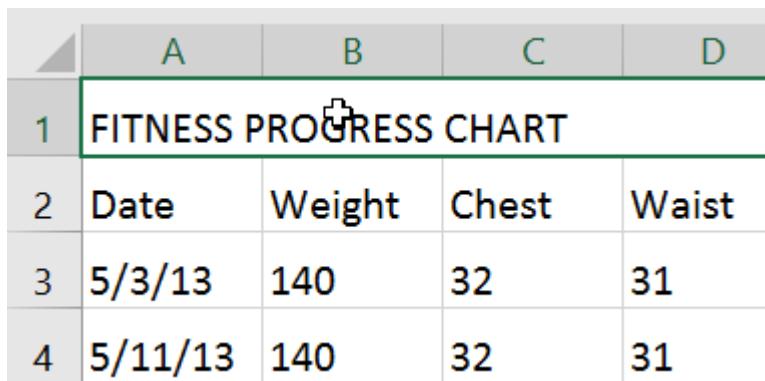
2. On the **Home** tab, click the **drop-down arrow** next to the **Font Size** command, then select the desired **font size**. In our example, we will choose **24** to make the text **larger**.

3. The text will change to the **selected font size**.

You can also use the **Increase Font Size** and **Decrease Font Size** commands or enter a **custom font size** using your keyboard.

1.15.2.   To change the font:

By default, the font of each new workbook is set to Calibri. However, Excel provides many other fonts you can use to customize your cell text. In the example below, we'll format our **title cell** to help distinguish it from the rest of the worksheet.

1. Select the **cell(s)** you want to modify.

2. On the **Home** tab, click the **drop-down arrow** next to the **Font** command, then select the desired **font**. In our example, we'll choose **Century Gothic**.
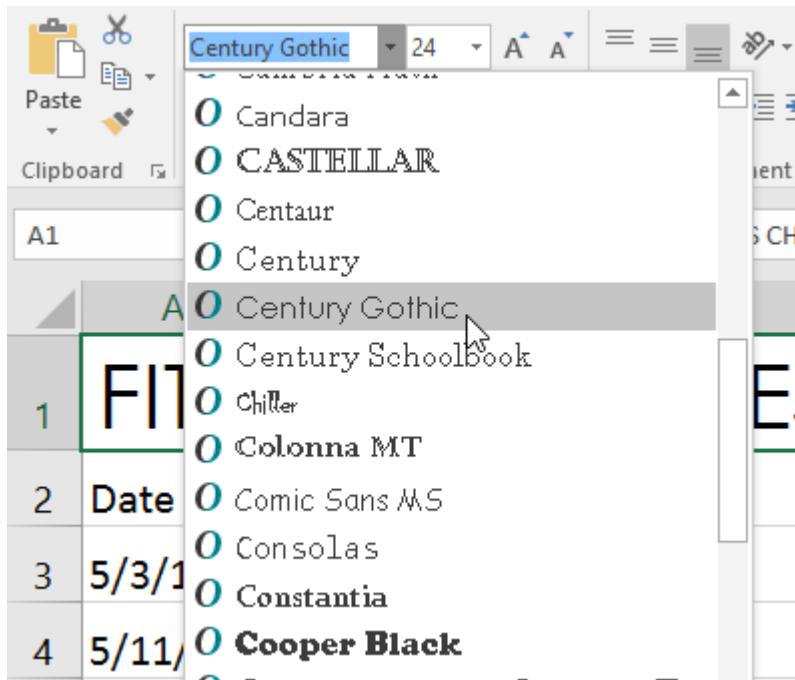
3. The text will change to the **selected font**.

When creating a workbook in the workplace, you'll want to select a font that is easy to read. Along with Calibri, standard reading fonts include Cambria, Times New Roman, and Arial.

1.15.3. To change the font color:

1. Select the **cell(s)** you want to modify.

2. On the **Home** tab, click the **drop-down arrow** next to the **Font Color** command, then select the desired **font color**. In our example, we'll choose **Green**.
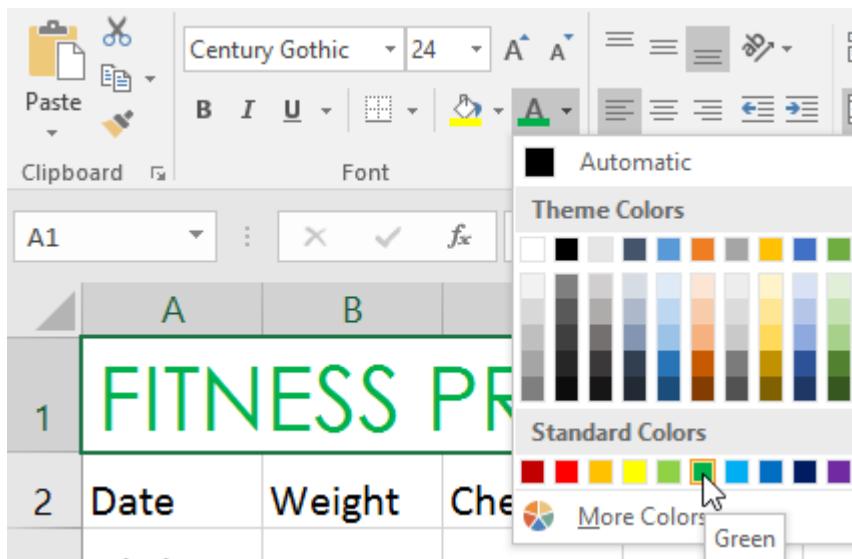
3. The text will change to the **selected font color**.

Select **More Colors** at the bottom of the menu to access additional color options. We've changed the font color to a bright pink.
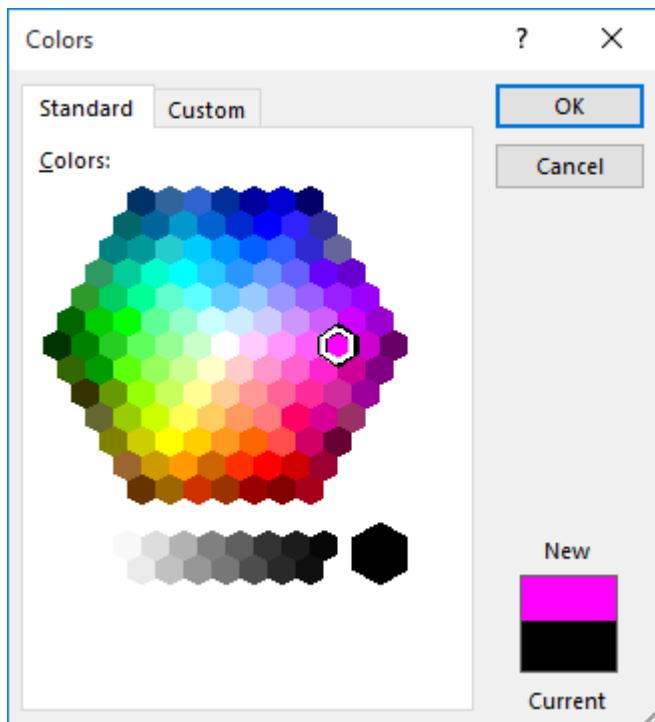
1.15.4. To use the Bold, Italic, and Underline commands:

1. Select the **cell(s)** you want to modify.

2. Click the Bold (**B**), Italic (*I*), or Underline (U) command on the **Home** tab. In our example, we'll make the selected cells **bold**.
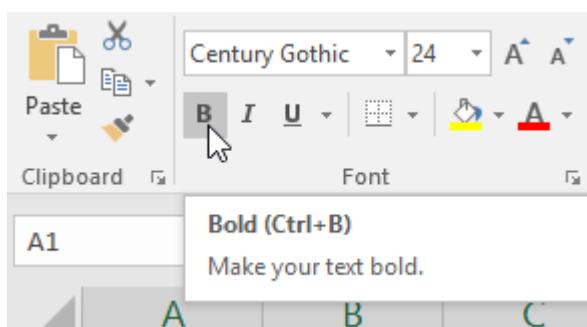
3. The **selected style** will be applied to the text.

You can also press **Ctrl+B** on your keyboard to make selected text **bold**, **Ctrl+I** to apply **italics**, and **Ctrl+U** to apply an **underline**.

1.16.   Cell borders and fill colors

Cell borders and **fill colors** allow you to create clear and defined boundaries for different sections of your worksheet. Below, we'll add cell borders and fill color to our **header cells** to help distinguish them from the rest of the worksheet.

1.16.1.   To add a fill color:

1. Select the **cell(s)** you want to modify.

2. On the **Home** tab, click the **drop-down arrow** next to the **Fill Color** command, then select the **fill color** you want to use. In our example, we'll choose a dark gray.
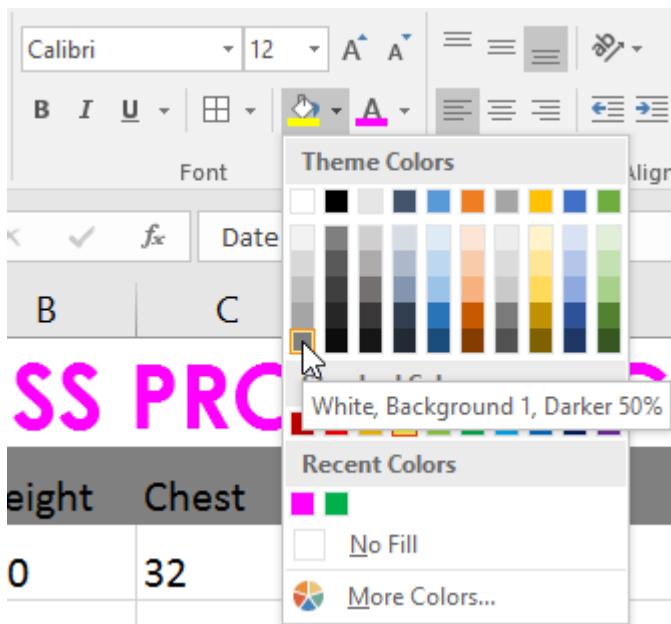
3. The **selected fill color** will appear in the selected cells. We've also changed the **font color** to **white** to make it more readable with this dark fill color.

	A	B	C	D	E	F	G	H	I
1	FITNESS PROGRESS CHART								
2	Date	Weight	Chest	Waist	Hips	Forearm	Estimated Lean Body	Estimated Body Fat	Estimated Body Fat %
3	5/3/13	140	32	31	40	11.5	103.8	36.2	0.259
4	5/11/13	140	32	31	39.5	11.5	103.9	36.1	0.258
5	5/19/13	139	32	31	39.5	11.5	103.2	35.8	0.258
6	5/26/13	138	31	30	39	11	103.4	35.6	0.256
7	6/1/13	138	31	30	39	11	103.4	35.6	0.256

1.16.2.   To add a border:

1. Select the **cell(s)** you want to modify.

	A	B	C	D	E	F	G	H	I
1	FITNESS PROGRESS CHART								
2	Date	Weight	Chest	Waist	Hips	Forearm	Estimated Lean Body	Estimated Body Fat	Estimated Body Fat %
3	5/3/13	140	32	31	40	11.5	103.8	36.2	0.259
4	5/11/13	140	32	31	39.5	11.5	103.9	36.1	0.258
5	5/19/13	139	32	31	39.5	11.5	103.2	35.8	0.258
6	5/26/13	138	31	30	39	11	103.4	35.6	0.256
7	6/1/13	138	31	30	39	11	103.4	35.6	0.256

2. On the **Home** tab, click the **drop-down arrow** next to the **Borders** command, then select the **border style** you want to use. In our example, we'll choose to display **All Borders**.
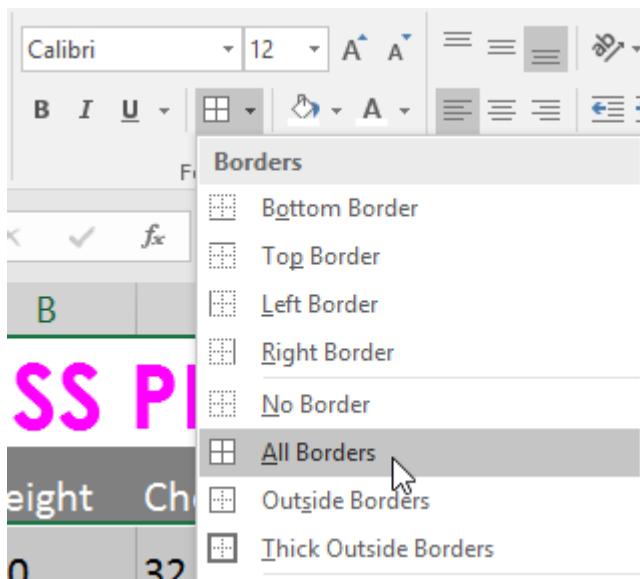
3. The **selected border style** will appear.

|	A	B	C	D	E	F	G	H	I
1	FITNESS PROGRESS CHART								
2	Date	Weight	Chest	Waist	Hips	Forearm	Estimated Lean Body	Estimated Body Fat	Estimated Body Fat %
3	5/3/13	140	32	31	40	11.5	103.8	36.2	0.259
4	5/11/13	140	32	31	39.5	11.5	103.9	36.1	0.258
5	5/19/13	139	32	31	39.5	11.5	103.2	35.8	0.258
6	5/26/13	138	31	30	39	11	103.4	35.6	0.256
7	6/1/13	138	31	30	39	11	103.4	35.6	0.256

You can draw borders and change the **line style** and **color** of borders with the **Draw Borders** tools at the bottom of the Borders drop-down menu.
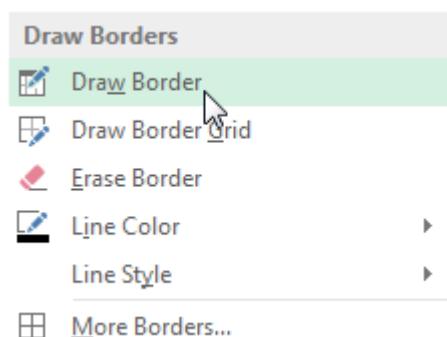
1.17. Cell styles

Instead of formatting cells manually, you can use Excel's **predesigned cell styles**. Cell styles are a quick way to include professional formatting for different parts of your workbook, such as **titles** and **headers**.

1.17.1. To apply a cell style:

In our example, we'll apply a new cell style to our existing **title** and **header cells**.

1. Select the **cell(s)** you want to modify.

	A	B	C	D	E	F	G	H	I
1	**FITNESS PROGRESS CHART**								
2	Date	Weight	Chest	Waist	Hips	Forearm	Estimated Lean Body	Estimated Body Fat	Estimated Body Fat %
3	5/3/13	140	32	31	40	11.5	103.8	36.2	0.259
4	5/11/13	140	32	31	39.5	11.5	103.9	36.1	0.258
5	5/19/13	139	32	31	39.5	11.5	103.2	35.8	0.258
6	5/26/13	138	31	30	39	11	103.4	35.6	0.256
7	6/1/13	138	31	30	39	11	103.4	35.6	0.256

2. Click the **Cell Styles** command on the **Home** tab, then choose the **desired style** from the drop-down menu.
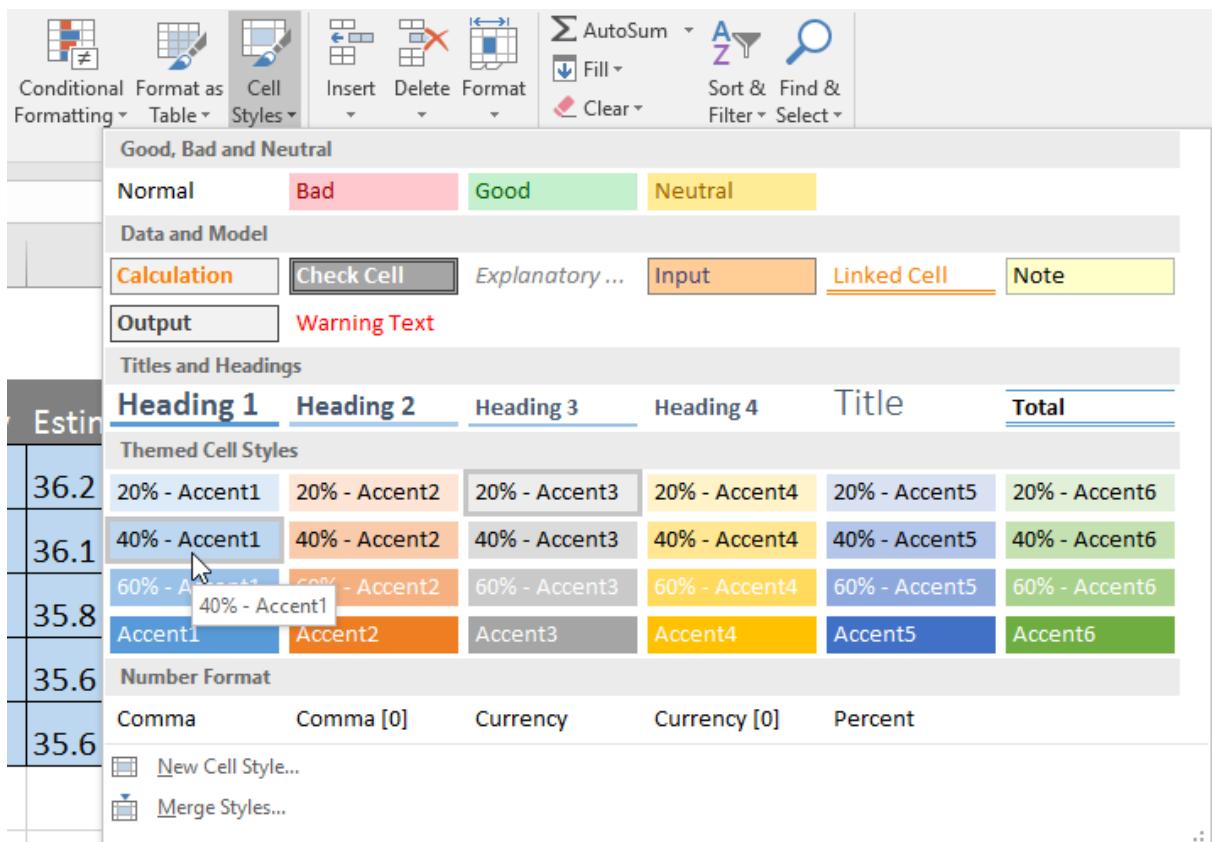
3. The **selected cell style** will appear.

	A	B	C	D	E	F	G	H	I
1	**FITNESS PROGRESS CHART**								
2	Date	Weight	Chest	Waist	Hips	Forearm	Estimated Lean Body	Estimated Body Fat	Estimated Body Fat %
3	5/3/13	140	32	31	40	11.5	103.8	36.2	0.259
4	5/11/13	140	32	31	39.5	11.5	103.9	36.1	0.258
5	5/19/13	139	32	31	39.5	11.5	103.2	35.8	0.258
6	5/26/13	138	31	30	39	11	103.4	35.6	0.256
7	6/1/13	138	31	30	39	11	103.4	35.6	0.256

Applying a cell style will **replace** any existing cell formatting except for text alignment. You may not want to use cell styles if you've already added a lot of formatting to your workbook.