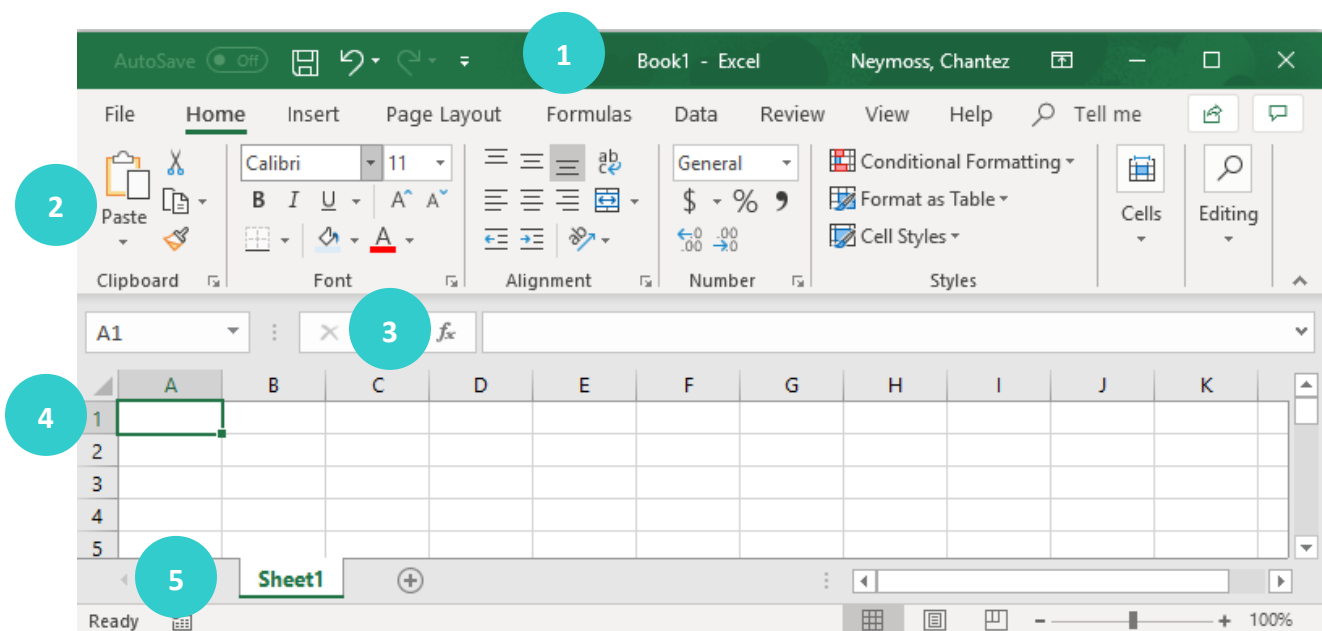


# Microsoft Excel Tip Sheet



**What is a Spreadsheet?** A spreadsheet is a way to organize data into rows and columns. This format allows users to calculate, analyze, and visually represent data. Excel is not the only spreadsheet program. Other examples include Google Sheets and Numbers (by Apple).

## Navigating Excel



1. **Title Bar** Displays title of workbook and other quick access information.
2. **Ribbon Menu** Contains all of your commonly needed options, grouped by category. The ribbon is grouped into tabs and each tab is grouped by category within that tab.
3. **Formula Bar** Left-hand side indicates the cell you are currently in. The right-hand side allows you to type directly into the selected cell. Formulas display here.
4. **Cell** The intersection of a column (noted by a letter) and a row (noted by a number). Cell A1 is selected above.
5. **Worksheet Tabs** Each workbook can contain multiple sheets. Here you can rename your sheet and add additional sheets.

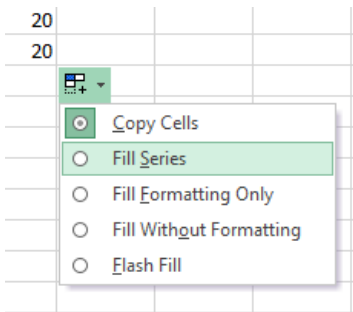
## Filling Data Across Columns and Rows

Another way to copy text from one cell to another is to drag it or “fill” it across a range of cells (a row or a column). This is a great method if you want all the text (or numbers) in a column or row to be the same.

In the active cell of the spreadsheet, the **fill handle** is a small black box at the bottom right corner, as shown in the image to the right. Dragging down from this area will fill in information: numbers, months, days of the week, or even formulas.

2012 Budget	
	Rent
January	600
February	
March	
April	

Fill Handle



**TIP** Excel will try to predict what you want it to do when you use the fill handle. For example, if you type in ‘January’ it will fill in with February, March, etc. But if you type something it can’t predict, it will simply copy what you entered. If Excel is not predicting your fill correctly, you can edit it. When you use the fill handle a small icon will pop up with alternate options.

January	600
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

600



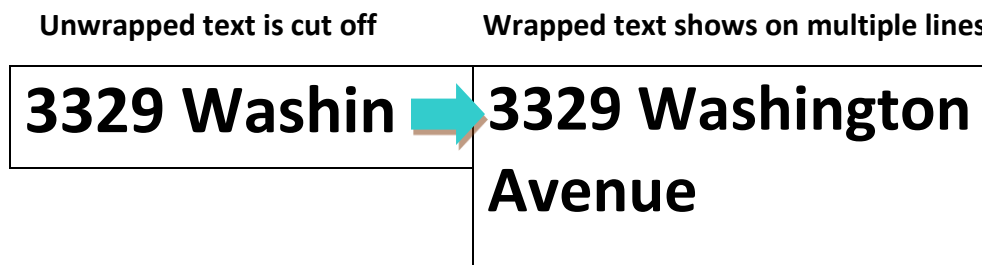
January	600
February	600
March	600
April	600
May	600
June	600
July	600
August	600
September	600
October	600
November	600
December	600

## Formatting Your Cells

Excel includes some advanced formatting features that allow you to adjust the look and feel of cells and how content displays within a cell.

### Wrapping Text

Wrapping the text will automatically modify a cell's row height, allowing cell contents to be displayed on multiple lines.



### Merge & Center

Merging data allows you to combine a cell with adjacent empty cells to create one large cell. This is commonly used for column headers or titles of a table that you want to span across several cells.

<b>Staff Contact</b>	<b>List</b>	
<b>Name</b>	<b>Email</b>	<b>Cell Phone</b>
<b>Amanda</b>	amanda@gmail.com	704-555-5555



<b>Staff Contact List</b>		
<b>Name</b>	<b>Email</b>	<b>Cell Phone</b>
<b>Amanda</b>	amanda@gmail.com	704-555-5555

## Filtering Data

**Filters** can be used to **narrow down** the data in your worksheet, allowing you to view only the information you need.

	A	B	C	D	E	F
1	ID #	Type	Equipment Detail	Checked Out	Checked In	Checked Out By
2	3000	Camera	Paris Lumina Digital Camera	12-May-13	15-May-13	Shannon Nguyen
3	3005	Camera	Canon Z-60 Digital Camera	27-Jul-13	06-Aug-13	Sela Shepard
4	3070	Camera	Omega PixL Digital Camcorder	06-Oct-13		Min Seung
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-13	01-Oct-13	Sofie Ragnar
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-13	16-Aug-13	Hank Sorenson

Your column headers will become drop down menus with additional options. Select the drop down arrow for the item you want to filter. Simply check the items you'd like to view, and Excel will hide the rest of your data.

	A	B	C	D
1	ID #	Type	Equipment Detail	Checked Out
2			Digital Camera	12-May-13
3			Digital Camera	27-Jul-13
4			Digital Camcorder	06-Oct-13
5			L200-3	15-Sep-13
6			L200-3	14-Aug-13
7			L200-3	08-Aug-13
8			L200-4X	26-Sep-13
9			Laptop	04-Oct-13
10			Laptop	19-Sep-13
11			Laptop	24-Sep-13
12			Maker	13-Jun-13
13			Travel Bag	27-Jul-13
14			Laptop Case	04-Oct-13
15			Laptop Case	04-Oct-13
16				28-Sep-13
17				26-Sep-13
18				22-Aug-13
19				
20				
21				
22	6102	Projector	Omega VisX 1.0	22-Aug-13

## Excel Formulas & Functions

Excel can calculate basic equations like addition, subtraction, multiplication, and division. By writing an equation in reverse, Excel will calculate it for you.

$$=2+2 \Rightarrow 4$$

There are also premade functions you can use that will make equations even easier.

**=SUM(b2:b5)** is the same as **=b2+b3+b4+b5**

The “autosum” function is a button you can click that will do this calculation for you.

## Cell References

While you can create simple formulas in Excel manually (for example, **=2+2** or **=5\*5**), most of the time you will use **cell addresses** to create a formula. This is known as making a **cell reference**.

	A	B
1	10	
2	5	
3	=A1+A2	
4		

The formula in cell A3 refers to the value in cell A1 plus the value in cell A2

	A	B
1	10	
2	5	
3	15	
4		

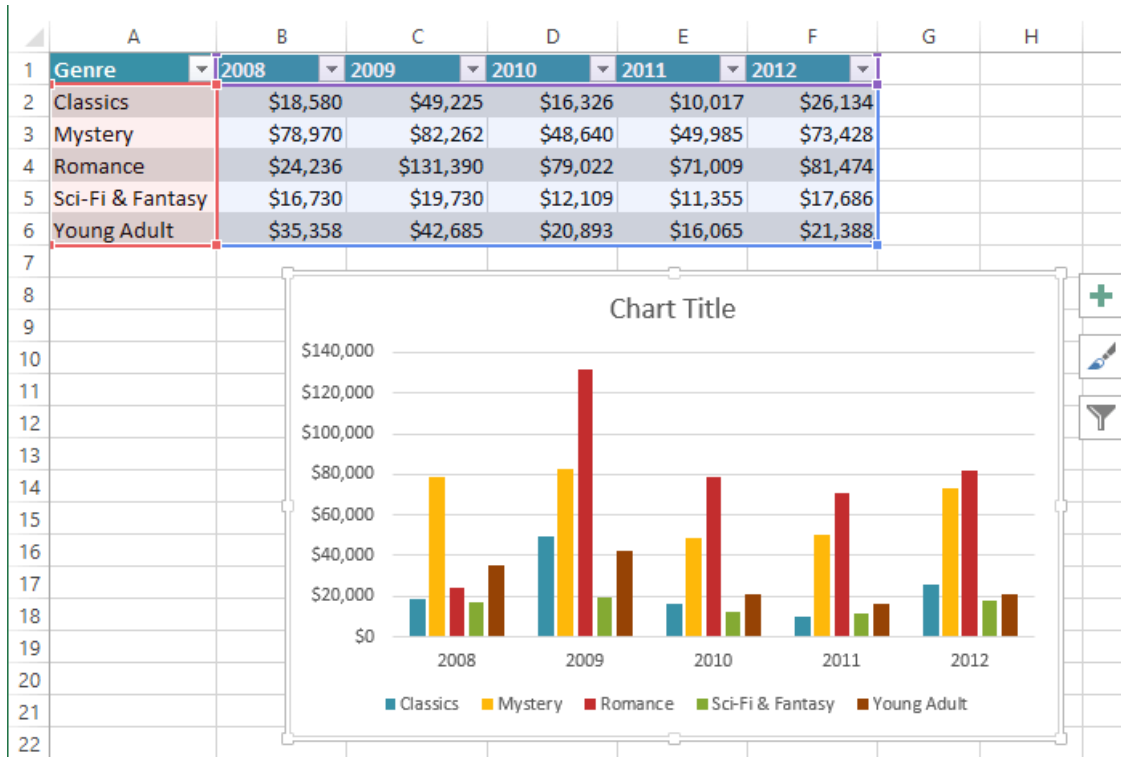
The formula calculates and displays the answer to the equation A1 plus A2

	A	B
1	15	
2	5	
3	20	
4		

The formula automatically recalculates when the value of a referenced cell is changed

## Charts and Graphs

It can often be difficult to interpret Excel workbooks that contain a lot of data. Charts allow you to illustrate your workbook data **graphically**, which makes it easy to visualize **comparisons** and **trends**.



To insert a chart in Excel, select the data you wish to include and go to the **Insert** tab. Select **Insert Chart** and choose the type of chart you would like to use.

