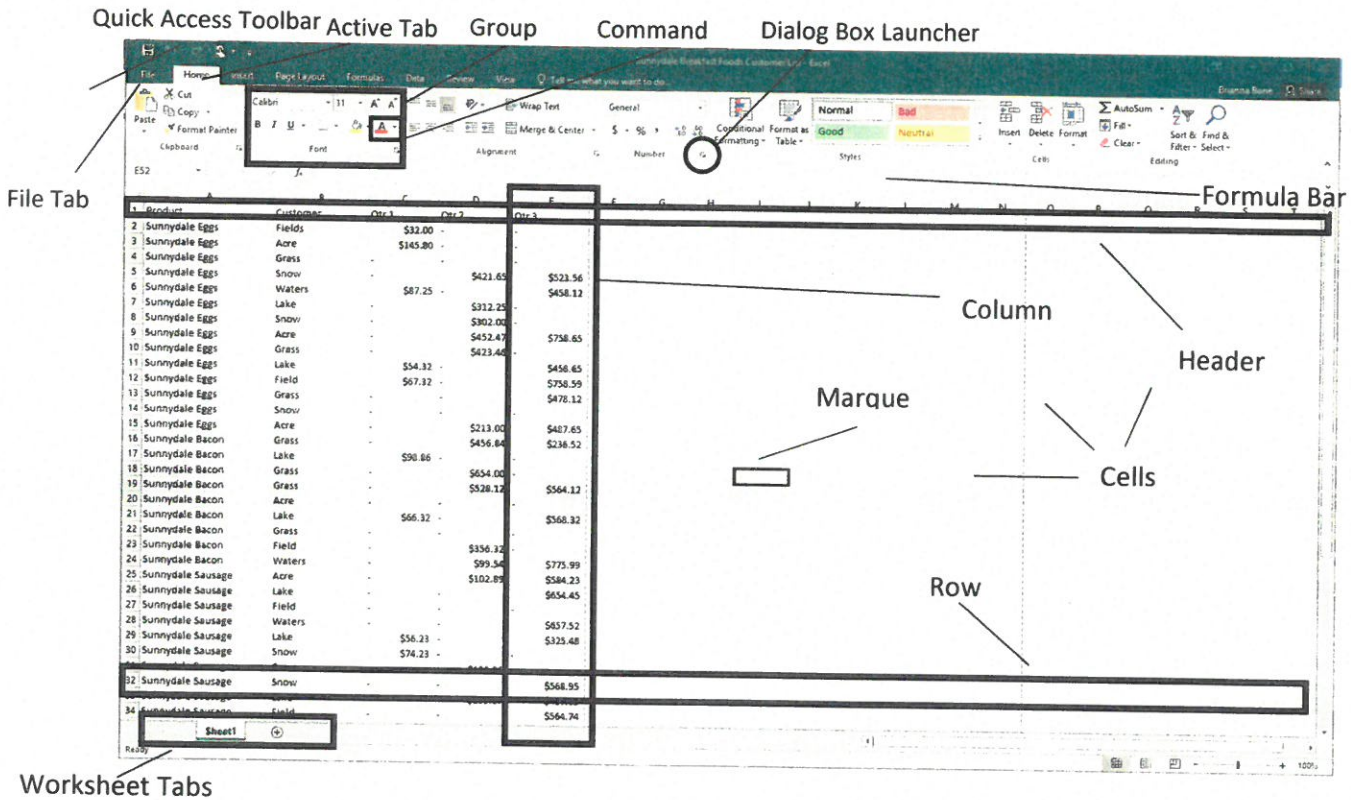


# Excel 2016 Interface & Environment



Microsoft Office programs are navigated by way of the Ribbon. Simple graphics and text descriptions make the Ribbon an easy way to find what you need. The Ribbon is divided up into Tabs. Each Tab contains like items. For example, in the Home Tab, you'll find things like font style and size, justification, cell alignment and preset styles. In the Insert Tab, you'll find things you can insert like pictures, shapes, charts and more.



**File Tab** – gives access to Backstage area for open, save, print and program settings.

**Quick Access Toolbar (QAT)** – place more commonly used commands here for faster access

**Active Tab** – The Tab currently displayed

**Command** – an individual function or setting within the document

**Group** – similar commands that are kept close together for ease of use

**Dialog Box Launcher** – a button to click that brings up additional options for a particular group

## Items and terms specific to Excel

**Workbook** – the entire Excel file commonly referred to as a “book”

**Worksheet** – a spreadsheet contained on the book commonly referred to as a ‘sheet’ or ‘page’

**Formula Bar** – identifies a cell and its content, functions or formula

**Header Row** – row of labels that is always (1) above your data and (2) formatted differently

**Cell** – an individual unit on the worksheet

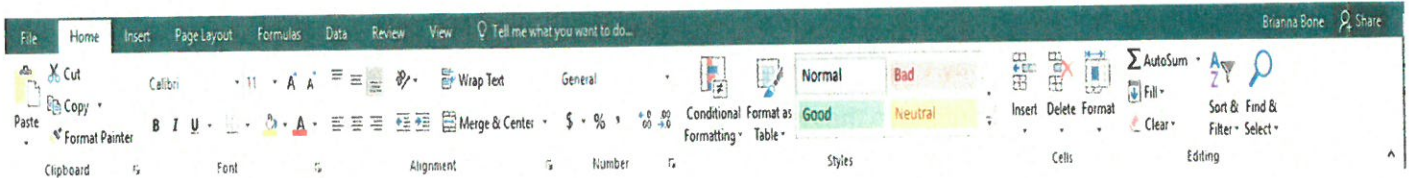
**Column** – vertical set of cells

**Row** – horizontal set of cells

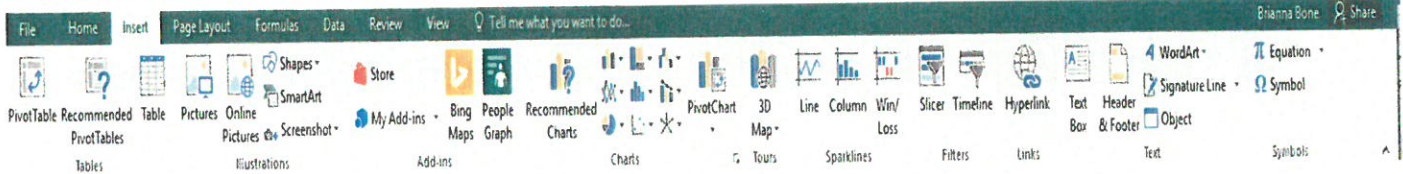
**Marquee** – the name of the black outline that surrounds a selected cell or group of cells

# The Excel 2016 Ribbon

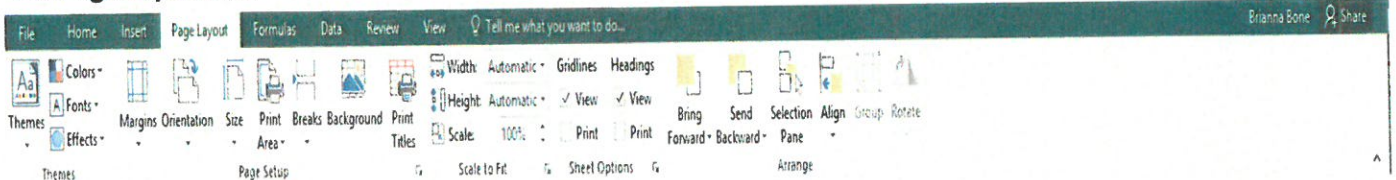
## The Home Tab



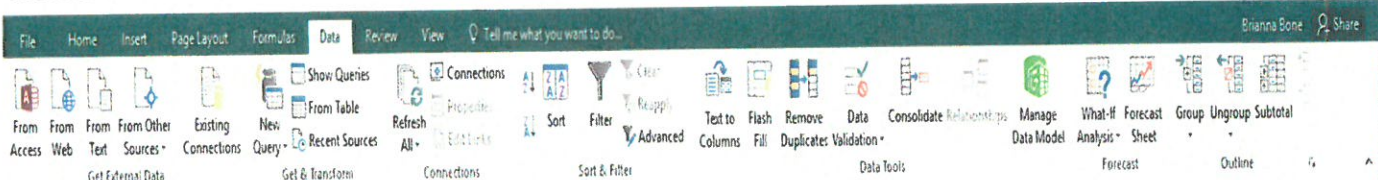
## The Insert Tab



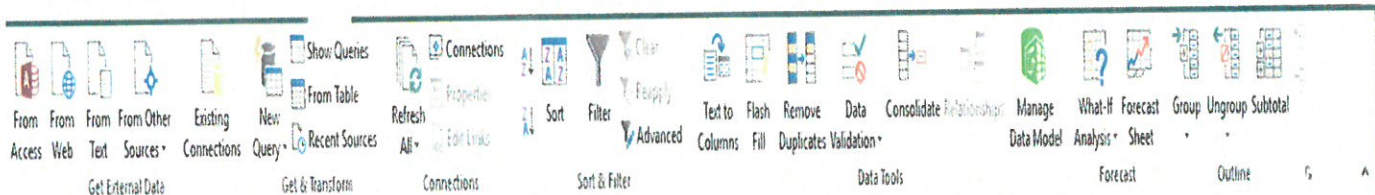
## The Page Layout Tab



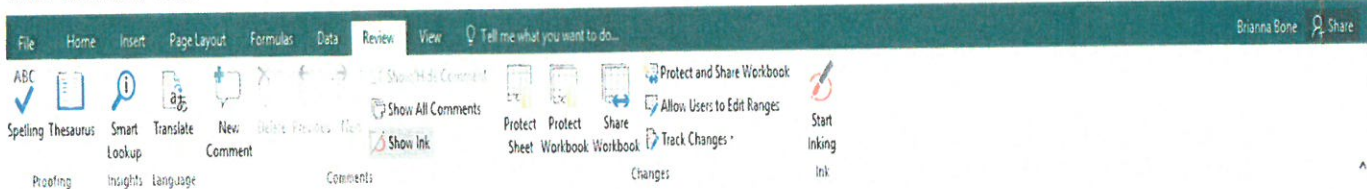
## The Formulas Tab



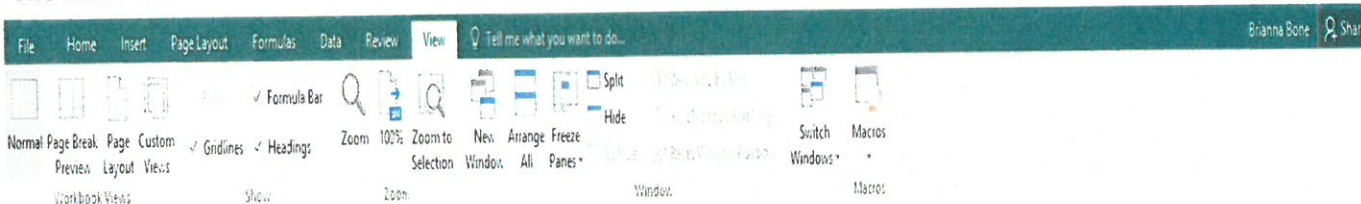
## The Data Tab



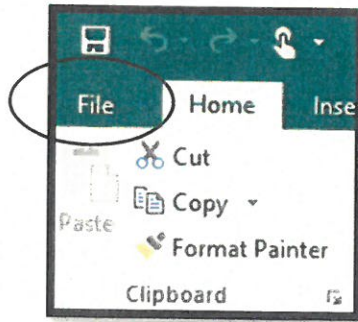
## The Review Tab



## The View Tab



# Excel 2016 Backstage



Microsoft introduced the Backstage in 2010. Backstage makes it easier to access, print and share your workbooks. Click on the File Tab, and Backstage displays. You'll see familiar commands such as Save As, Open and Close. Also helpful are the displays and options that you'll find under these commands in the left column:

- Info
- New
- Print



## Info Command

General workbook information can be found under the Info Command:

- Permissions
- Versions Management
- Properties

Click the Back Arrow in the upper left corner anytime to return to editing.



# Excel Keyboard Shortcuts



<b>To do this</b>	<b>Press</b>
Accept a cell entry and select the cell below	<b>Enter</b>
Accept a cell entry and select the next cell to the right	<b>Tab</b>
Accept a cell entry and select the cell above	<b>Shift + Enter</b>
Accept a cell entry and select the cell to the left	<b>Shift + Tab</b>
Access a tab or command	<b>Alt + KeyTip</b>
Add a hard return in a cell	<b>Alt + Enter</b>
Apply the currency style	<b>Ctrl + Shift + \$</b>
Apply the percentage style	<b>Ctrl + Shift + %</b>
Bold the selected text	<b>Ctrl + B</b>
Cancel a cell entry	<b>Esc</b>
Cancel a Formula Bar entry	<b>Esc</b>
Clear the contents of the selected cells	<b>Delete</b>
Close	<b>Ctrl + W</b>
Copy the selected cells	<b>Ctrl + C</b>
Create a chart based on the selected cells	<b>F11</b>
Create an absolute reference in the Formula Bar	<b>F4</b>
Cut the selected cells	<b>Ctrl + X</b>
Delete a column or row (depending on which is selected)	<b>Ctrl + -</b>
Delete one character to the left	<b>Backspace</b>
Delete one character to the right	<b>Delete</b>
Delete text to the end of the line	<b>Ctrl + Delete</b>
Edit a cell comment	<b>Shift + F2</b>
Fill down	<b>Ctrl + D</b>
Fill right	<b>Ctrl + R</b>
Format the selected cells	<b>Ctrl + 1</b>
Help	<b>F1</b>
Insert a hyperlink	<b>Ctrl + K</b>
Insert a new row or column (based on which is selected)	<b>Ctrl + +</b>

<b>To do this</b>	<b>Press</b>
Insert a new worksheet	Shift + F11 or Alt + Shift + F1
Insert an AutoSum formula	Alt + =
Italicize the selected text	Ctrl + I
Move down one screen	Page Down
Move one cell to the left	Shift + Tab
Move one cell to the right	Tab
Move on cell up, down, left, or right	Arrow keys
Move one screen to the left	Alt + Page Up
Move one screen to the right	Alt + Page Down
Move to the beginning of the row	Home
Move to the beginning of the worksheet (upper left corner)	Ctrl + Home
Move to the end of the worksheet (lower right corner)	Ctrl + End
Move to the next tab in the workbook	Ctrl + Page Down
Move to the previous tab in the workbook	Ctrl + Page Up
Move up one screen	Page Up
Open a blank workbook	Ctrl + N
Open an existing workbook	Ctrl + O
Paste copied cells	Ctrl + V
Print a worksheet or workbook	Ctrl + P
Redo the last undone action	Ctrl + Y
Repeat the last action	F4 or Ctrl + Y
Save the workbook	Ctrl + S
Save as	F12
Select the entire column	Ctrl + Spacebar
Select the entire row	Shift + Spacebar
Show Format Cells dialog box	Ctrl + 1
Start a formula	=
Start a new line in the same cell	Alt + Enter
Underline the selected text	Ctrl + U
Undo the last action	Ctrl + Z
View/hide the ribbon	Ctrl + F1

# Excel 2016: Introduction Step-by-Step

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## Open an Existing Workbook:

1. Click the **File Tab**.
2. In the left column, select **Open**.
3. Navigate to the file you want and double-click it.

## Create a New Workbook:

1. Click the **File Tab**.
2. In the middle column, select **New**.
3. In the left column select **Blank Workbook**.

## Create a New Workbook from a Template:

1. Click the **File Tab**.
2. In the left column select **New**.
3. Browse through available templates. Click the template you want.
4. Search for specific templates by typing into the search box (ex. calendar or timesheet)

## Save a Workbook:

1. Click the **File Tab**.
2. In the left column click **Save**.

## Save a Workbook with a Different Name:

1. Click the **File Tab**.
2. In the left column select **Save As**.
3. Navigate to the location you want.
4. Type in the new file name.
5. Click the **Save** button.

## Save Office 2016 Workbook to an Earlier Format:

1. Click the **File Tab**.
2. In the left column click **Save As**.
3. Navigate to the location you want.
4. In the "Save as type" box, select **Excel 97-2003 Workbook**.
5. Click the **Save** button.
6. Click **Continue** when you see the compatibility-warning message.

## Select a Cell or Range of Cells:

To select a single cell

1. Click in the cell you want to work with.

To select a range of cells

1. Click in the first cell in the range.
2. Drag your mouse to the last cell in the range.

### Select Rows or Columns:

To select an entire row

1. Click the row number.

To select an entire column

1. Click the column letter.

To select several adjacent rows or columns

1. Click and drag your mouse across the row numbers or column letters.

### Enter Data Into Cells:

To type information in a blank cell

1. Select the cell where you want to type.
2. Type your information
3. Press **Enter** or **Tab**.

To replace information in a cell

1. Select the cell where you want to replace information.
2. Type your information.
3. Press **Enter** or **Tab**.

To edit information in a cell

1. Double-click the cell.
2. In the cell or in the **Formula Bar**, place the cursor where you want it.
3. Make your edits.
4. Press **Enter** or **Tab**.

### Insert Rows and Columns:

To insert a row

1. Right-click the row below where you want the new one.
2. Select **Insert**.

-or-

1. Select the row below where you want the new one.
2. Click the **Insert** button on the **Home Tab**.

To insert a column

1. Right-click the column to the right of where you want the new one.
2. Select insert.

-or-

1. Select the column to right of where you want the new one.
2. Click the **Insert** button on the **Home Tab**.

### Delete Rows and Columns:

1. Right-click the row/column you want to delete.



2. Select **Delete**.
- or-
1. Select the row/column you want to delete.
  2. Click the **Delete** button on the **Home Tab**.

#### **Modify Height and Width of Columns and Rows:**

1. Click the row or column-heading border.
2. Drag the border to the height or width you would like.

#### **Automatically Adjust Column Width or Row Height:**

1. Select the rows or columns you want to adjust.
2. On the **Home Tab**, in the **Cells Group**, click the **Format** drop-down arrow.
3. Select **AutoFit Column Width** or **AutoFit Row Height**.

#### **Freeze Panes:**

1. Click in the cell beneath the row and to the right of any column you want to freeze.
2. Click the **View Tab**.
3. In the **Window Group**, click the **Freeze Panes** drop-down arrow.
4. Select **Freeze Panes**.

#### **Unfreeze Panes:**

1. Click the **View Tab**.
2. In the **Window Group**, click the **Freeze Panes** drop-down arrow.
3. Select **Unfreeze Panes**.

#### **Hide Rows or Columns:**

1. Select the row or column you want to hide.
2. On the **Home Tab**, in the **Cells Group**, click the **Format** drop-down arrow.
3. Select **Hide & Unhide**.
4. Select **Hide Rows** or **Hide Columns**.

#### **Unhide Rows or Columns:**

1. Select the **Select All** button (the unmarked square above the row heading 1 and to the left of the column heading A).
2. On the **Home Tab**, in the **Cells Group**, click the **Format** drop-down arrow.
3. Select **Hide & Unhide**.
4. Select **Unhide Rows** or **Unhide Columns**.

#### **Add a new Worksheet:**

1. Click the **Insert Worksheet** icon (the icon to the right of your last worksheet tab).
- or-
1. On the **Home Tab**, in the **Cells Group**, click the **Insert** drop-down arrow.
  2. Select **Insert Sheet**.

### **Rearrange Worksheets:**

To move a worksheet

1. Click the worksheet tab.
2. Drag it to where you want it.

To copy a worksheet

1. Click the worksheet tab.
2. Press **Ctrl** while dragging to tab to a new location.

### **Cut or Copy and Paste Data:**

To copy and paste information

1. Select the cell you want to copy.
2. On the **Home Tab**, in the **Clipboard Group**, click the **Copy** button.
3. Select the cell where you want the information to be added.
4. On the **Home Tab**, in the **Clipboard Group**, click the **Paste** button.

To cut information

1. Select the cell you want to cut.
2. On the **Home Tab**, in the **Clipboard Group**, click the **Cut** button.
3. Select the cell where you want the information to be added.
4. On the **Home Tab**, in the **Clipboard Group**, click the **Paste** button.

#### **Tips:**

Use the **Paste Options** button and **Match Destination Formatting** to paste the information to a new cell without changing the formatting.

If you select **Paste Special** instead of **Paste**, you have more choices. For example, you can paste only the formatting without pasting the data, or vice versa.

### **Use Auto Fill to Enter Data Multiple Times.**

To copy information into multiple cells

1. Select the cell you want to copy,
2. Click and drag the **Fill Handle** (the square at the bottom right corner of the marquee) across the cells where you want the information added.

To fill a series of numbers;

1. Enter the first value.
2. Select the cell.
3. Click and drag the **Fill Handle** across the cells where you want the information added.

Fill Series works with:

Numbers  
Days of the Week  
Months of the Year  
Calendar Dates

**Tip:**

For a custom series (such as every Monday or only even numbers), type in, then select the first two values, and then use the **Fill Handle**.

**Insert, View and Edit Comments:**

To insert a comment

1. Select a cell.
2. Click the **Review Tab**.
3. In the **Comments Group**, click **New Comment**.
4. Type your comment.
5. Click away from the comment box when finished.

To view a comment

1. Mouse-over the cell that has the comment, (the comment is red triangle in the upper-right corner of the cell).

To edit a comment

1. Select the cell comment in attached to.
2. Click the **Review Tab**.
3. In the **Comments Group**, click **Edit Comment**.
4. Make the changes you want to make.
5. Click away from the comment box when finished.

**Paste Formatting:**

To copy and paste formatting from cell to cell

1. Select the cells with the formatting you want.
2. On the **Home Tab**, in the **Clipboard Group**, click the **Format Painter** button.
3. Select the cells you want to give the formatting to.

To copy and paste formatting several times

1. Select the cells with the formatting you want.
2. On the **Home Tab**, in the **Clipboard Group**, click the **Format Painter** button.
3. Select the cells you want to give formatting to,
4. Repeat as many times as necessary.
5. Click the **Format Painter** button again.

**Create a Formula with a Cell Reference:**

1. Click the cell where you want the formula.
2. In the cell, or the **Formula Bar**, type an equal sign (=).
3. As you type your formula, type the cell reference, or click the reference cell.
4. Press **Enter** or **Tab**.

<u>If you want:</u>	<u>Example of Cell reference:</u>
Cell in the same worksheet	A1
Cell in a different worksheet	SheetName!A1
Cell in a different workbook	[WorkbookName.xlsx]SheetName!A1

### Enter a Function From Scratch:

1. Select the cell where you want the function to appear.
2. Type an equal sign.
3. Type the name of the function
4. Type an opening parenthesis.
5. Type the function arguments.
6. Type the closing parenthesis.
7. Press Enter.

### Common Functions:

SUM  
AVERAGE  
COUNT  
MIN  
MAX

### Create Quick Calculations with AutoSum:

1. Select the cell where you want the total to appear.
2. Click the **AutoSum** button.
3. Adjust the cell references as needed:
  - Click and drag the selection handles.
  - Type a different cell reference.
4. Press **Enter**.

### Sort Your Data:

To create a simple sort

1. Select the cells you want to sort.
2. On the **Home Tab**, in the Editing Group, click the **Sort & Filter** drop-down arrow.
3. Select the type of sort you want.

To create a multi-level sort

1. Select the cells you want to sort.
2. On the **Home Tab**, in the **Editing Group**, click the **Sort & Filter** drop-down arrow.
3. Select **Custom Sort**.
4. Click the **Add Level** button.
5. In the **Sort by** field, select the column you want to use for the primary sort.
6. In the **Order** field, select the type of sort you want.
7. Repeat steps 4-6 for additional levels.
8. Click the **OK** button.

**Filter Your Data:**

To set **AutoFilter**

1. Select the cells you want to filter.
2. On the **Home Tab**, in the **Editing Group**, click the **Sort & Filter** drop-down arrow.
3. Select **Filter**.

To filter your data with **AutoFilter**

1. Click the drop-down arrow for the column you want to filter.
2. Select or deselect the values you want to see or hide.
3. Click **OK**.

(Come back to this menu and select **Clear Filter** to return all the values.)

**Print or Preview a Spreadsheet:**

1. Click the **File Tab**.
2. In the left column click **Print**.
3. The preview appears on the far right.
4. Choose print options in the middle column.
5. Click the **Print Button** at the top of the middle column.

**Fit to a Set Number of Pages:**

1. Click the **Print Layout Tab**.
2. In the **Scale to Fit Group**, click either the **Width** or the **Height** drop-down arrow.
3. Select the number of pages you want.

# Formulas do Math. Functions do Magic.

## Formulas do Math

+ - \* /

### Order of Operations:

1. Parenthesis
2. Exponents
3. Multiplication
4. Division
5. Addition
6. Subtraction

= 4 \* 3 + 2    order of operations is    4 \* 3 = 12    12 + 2 = 14

= 4 \* (3 + 2)    order of operations is    3 + 2 = 5    4 \* 5 = 20

### Cell References

= B2 \* (C2 + 2)

# Functions do Magic.

Functions will do commands for you.

Common Functions:

<b>SUM</b>	add a set of #s
<b>AVERAGE</b>	add a set of #s, divide by how many are in the set
<b>COUNT</b>	count how many #s there are in a selected range
<b>MIN</b>	what is the smallest # value in a selected range
<b>MAX</b>	what is the largest # value in a selected range

**Function Syntax** is the way you properly build your Function.

= SUM (B2 : B6)

=	begins the function
SUM	is the command
(	open parenthesis begins the argument
B2:B6	the argument: cell references and other command info
)	close parenthesis closes the argument