

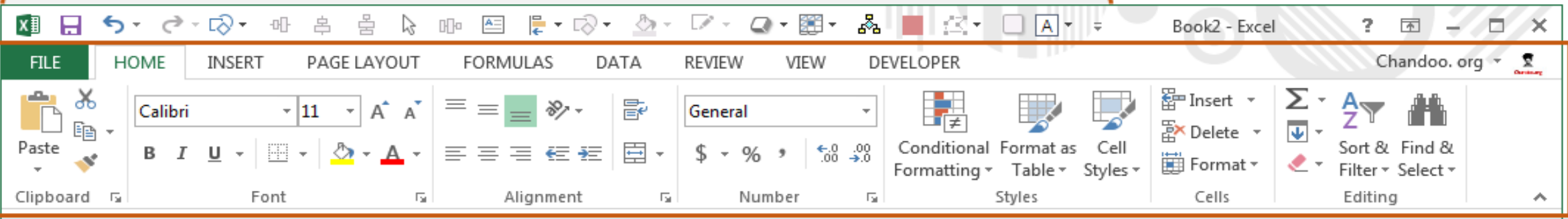
Microsoft Excel Functions & Shortcuts for Beginners



KISS ~ Keep It Simple Stupid!



Quick Access Toolbar

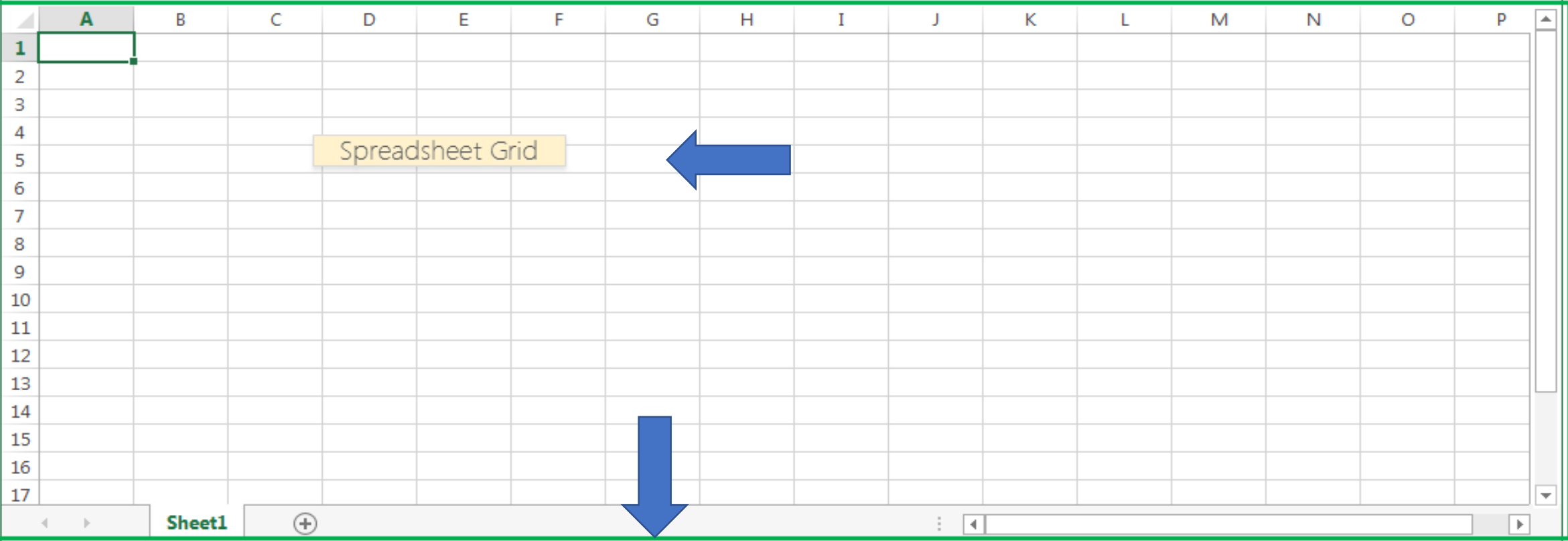


The top section of the Excel window contains the Quick Access Toolbar and the Ribbon. The Quick Access Toolbar is located at the top left and includes icons for Save, Undo, and Redo. The Ribbon is a horizontal bar below the Quick Access Toolbar, divided into tabs: FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, and DEVELOPER. The HOME tab is currently active, showing groups for Clipboard, Font, Alignment, Number, Styles, Cells, and Editing. Each group contains various icons for performing tasks like pasting, bolding, italicizing, and sorting.

Ribbon



The Formula Bar is located below the Ribbon. It shows the active cell address 'A1' and contains the text 'Formula Bar'.



The Spreadsheet Grid is the main area of the Excel window, consisting of a grid of cells. The columns are labeled with letters from A to P, and the rows are labeled with numbers from 1 to 17. Cell A1 is currently selected and highlighted with a green border.

Spreadsheet Grid



The Status Bar is located at the bottom of the Excel window. It shows the current sheet name 'Sheet1', a plus sign for adding new sheets, and a zoom level of 100%.

Status Bar

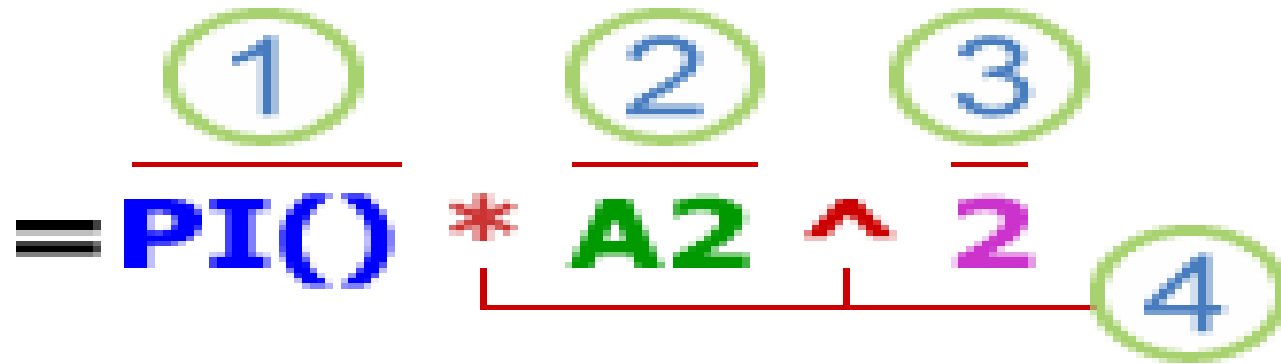
Function Library

- Insert Function
- AutoSum
- Recently Used
- Financial
- Logical
- Text
- Date & Time
- Lookup & Reference
- Math & Trig
- More Functions
- Name Manager
- Define Name
- Use in Formula
- Create from Selection
- Trace Precedents
- Trace Dependents
- Remove Arrows
- Show Formulas
- Error Checking
- Evaluate Formula
- Watch Window
- Calculation Options
- Calculate Now
- Calculate Sheet

A1

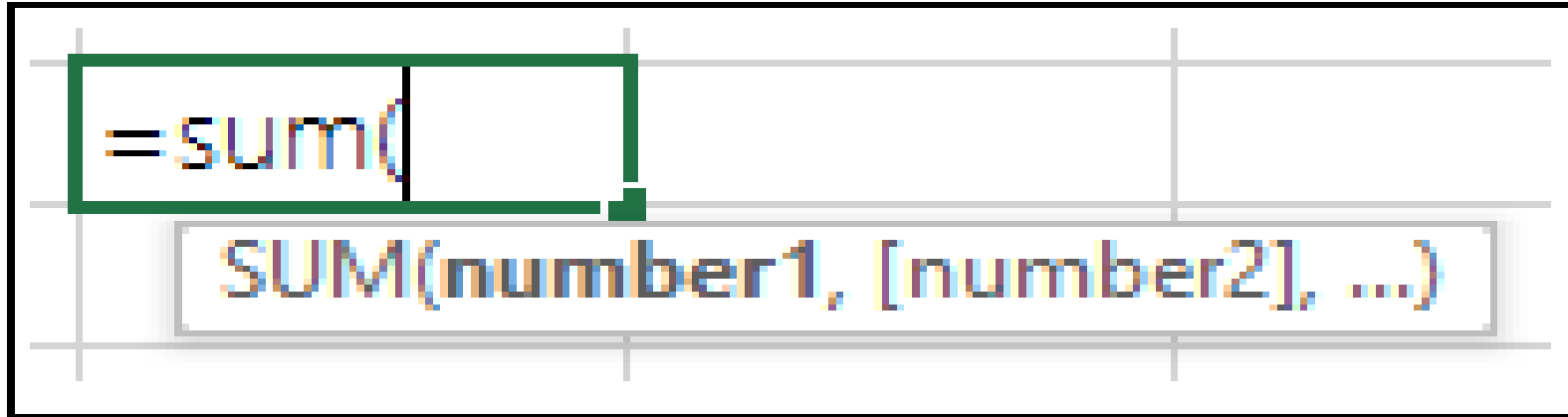
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
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31																				
32																				
33																				

Parts of a Formula



- 1.Functions
- 2.References
- 3.Constants
- 4.Operators

Formula Example ~ Single Argument

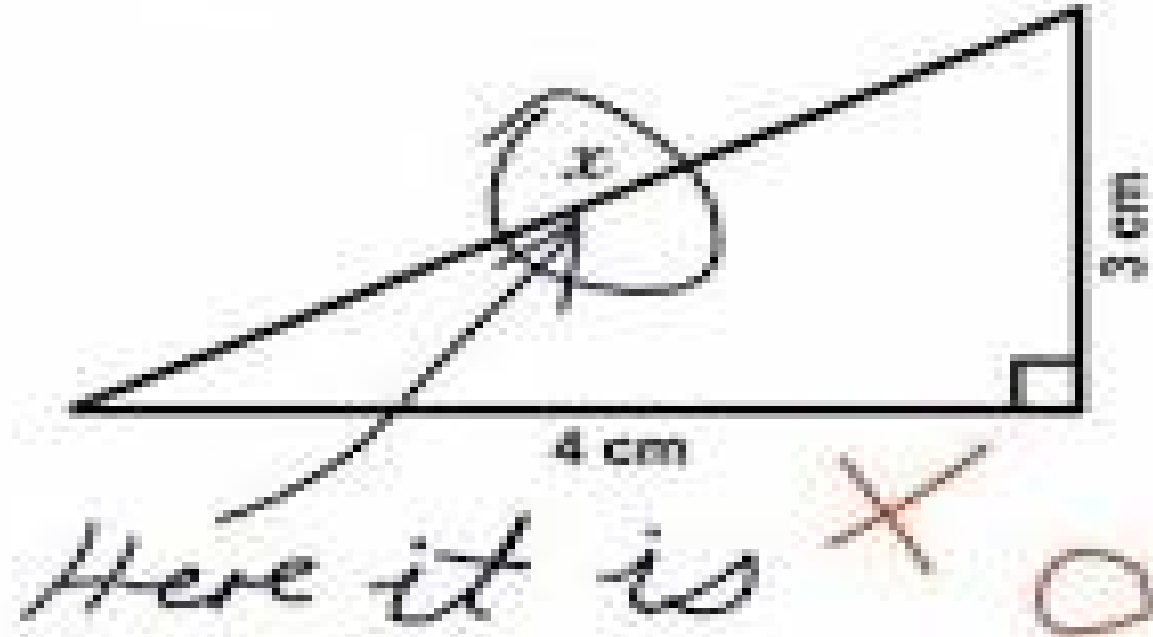


=SUM(A1:A10) is an example of a single argument.

Mathematical Formulas

- Sum
- Count
- Counta
- Sumif
- Average
- Round
- Product
- Roman

3. Find x .



SUMIF


What it does?				
<i>sums items in a list matching a condition</i>				
Syntax:				
sumif(in this range,values that meet this criteria,[sum-this-range])				
Example:				
=sumif(A1:A20,10) = sums the cells with the value of "10"				

SUMIF

- We want to know how many HP Laser Jet Printers we have.
- =sumif(a2:a14,"HP Laser Jet",c2:c14)
- Which equals 11
- We want to know how many HP Laser Jet Printers the POLICE have.
- =sumifs(c2:c14,a2:14,"HP Laser Jet",b2:b14,"Police")
- Which equals 3

Color Printers	Dept	Quantity
HP Laser Jet	Admin	4
HP M553	Construction	5
HP Laser Jet	Construction	1
Epson WF2750	Police	4
HP Laser Jet Pro	Fire Prevention	1
Canon MF634	Human Svcs	2
HP Laser Jet	Police	3
Canon MF634	Recreation	3
HP Laser Jet	Parks	1
HP M553	Clerk	1
HP Laser Jet	Purchasing	1
Epson WF2750	OEM	1
HP Laser Jet	Golf Course	1

SUMIF

=sumif(condition range,condition, sum range)					
Sum alternate Rows/Columns			<u>Number</u>	<u>Amount</u>	<u>Condition</u>
Alt. Row Sum 1:	183		1	56	0
<i>=sumif(E15:E21,1,D15:D21)</i>			2	35	1
Alt. Row Sum 0:	285		3	66	0
<i>=sumif(E15:E21,0,D15:D21)</i>			4	23	1
			5	98	0
			6	125	1
			7	65	0

AVERAGE

What it does?				
<i>averages a group of numbers</i>				
Syntax:				
average(of this number range)				
Example:				
=average(2,4,6)	4	5	10	
=average(c9:d11)	12.4166667	3.5	20	
		6	30	

ROUND

What it does?			
<i>rounds a number to the nearest decimal you specify</i>			
Syntax:			
round(this number, to this many digits after decimal)			
Example:			
=round(12.416667,2)		12.42	
Other:			
=rounddown(12.416667,2)		12.41	
=roundup(12.416667,2)		12.42	

Using Rounding for Budgeting

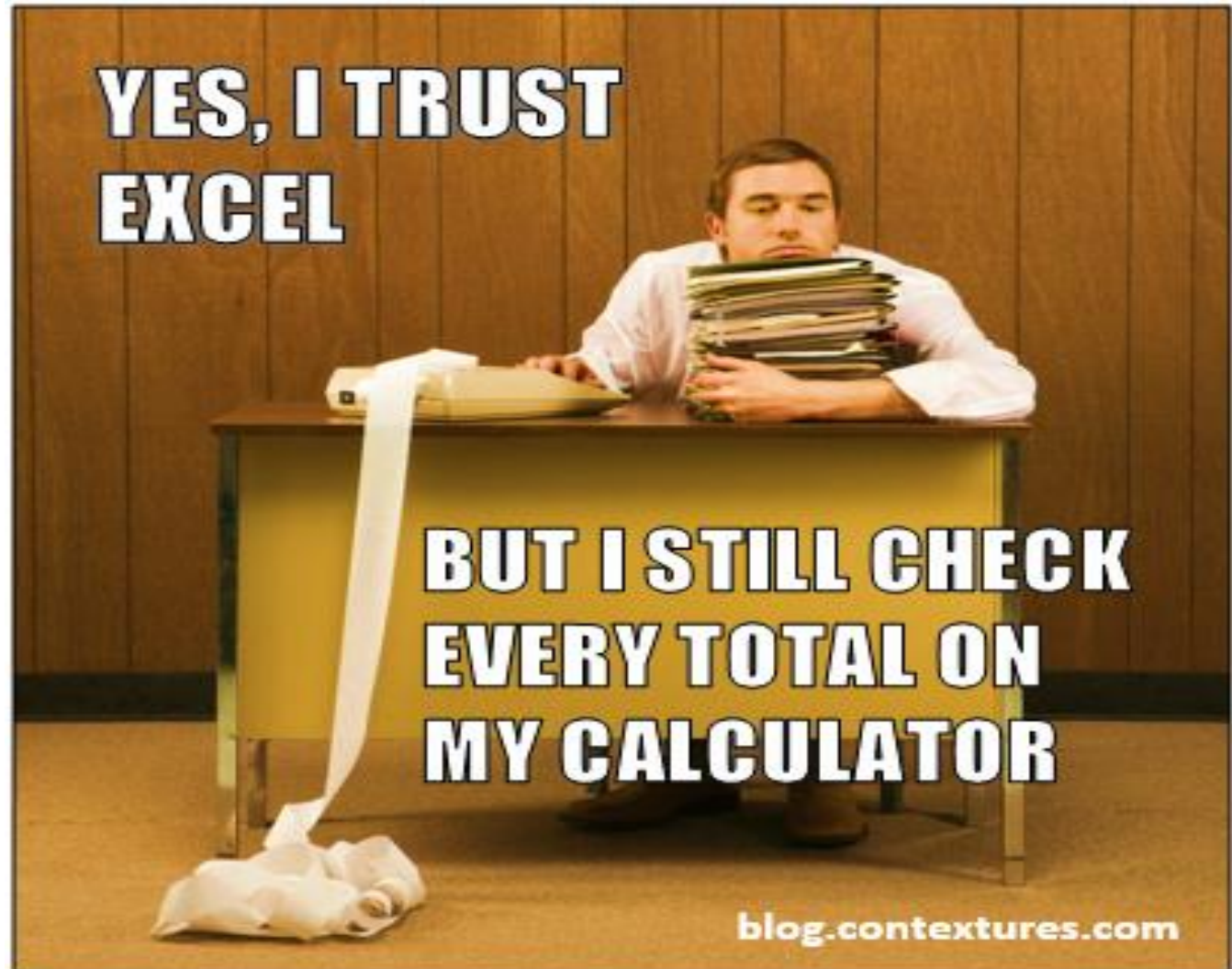
Assessed Value	7,189,343,350				
TAX	Amount to be Raised	RATE no round	RATE no round expanded	RATE with round	Actual Rate Struck
Municipal	42,778,836.00	0.60	0.5950	0.595	0.595
Municipal Open Space	1,437,869.00	0.02	0.0200	0.020	0.020
Library	2,871,017.00	0.04	0.0399	0.040	0.039
County	21,720,889.77	0.30	0.3021	0.302	0.303
County Open Space	761,633.70	0.01	0.0106	0.011	0.011
School	132,965,271.00	<u>1.85</u>	<u>1.8495</u>	<u>1.849</u>	<u>1.850</u>
Total		2.82	2.8172	2.8170	2.818
					UGH!!!

ROMAN/ARABIC

What it does?		
<i>converts a number to roman numeral format or visa versa</i>		
Syntax:		
roman(number)	arabic("text")	
Example:		
=roman(65)		LXV
=arabic(LXV)		65

Logical Formulas

- If
- And
- Or
- Not
- Choose
- Iferror
- Istext



IF

What it does?

checks whether a condition is met and returns one value if TRUE and another if FALSE

Syntax:

if(is-this-true,then do this, or this)

Example:

=if(25<15,"loser","winner") = **winner**

Other:

=sumif(condition range,condition, sum range)

IFERROR

What it does?				
<i>an easy way to handle errors in formulas</i>				
<i>IFERROR returns the value you want incase of</i>				
<i>an error with the formula</i>				
Syntax:				
iferror(formula, value to return if there is an error)				
Example:				
=iferror(1/0,"can't divide by zero")		can't divide by zero		
=iferror(0/1,"can't divide by zero")		0		

Text Formulas

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- Proper
- Trim
- Dollar
- Rept
- Text
- Type



"Before we move on, does anyone else want to take a selfie with the fourth quarter earnings?"

Shortcuts

- Keyboard Shortcuts
- Insert Function
- Define Name
- Error Checking
- Watch Window



Keyboard Shortcuts

- F2
- Ctrl-Home
- Double Click to change a tab/sheet name
- Copy sheet within a workbook
- Right Click to get Menu
- Press “Alt” Key and letters appear called “Key Tips”



F2

3 Year Forecast 2017 - Excel

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Normal Page Break Preview Page Layout Custom Views Ruler Formula Bar Gridlines Headings Zoom 100% Zoom to Selection New Window Arrange All Freeze Panes Split View Side by Side Synchronous Scrolling Switch Windows Macros

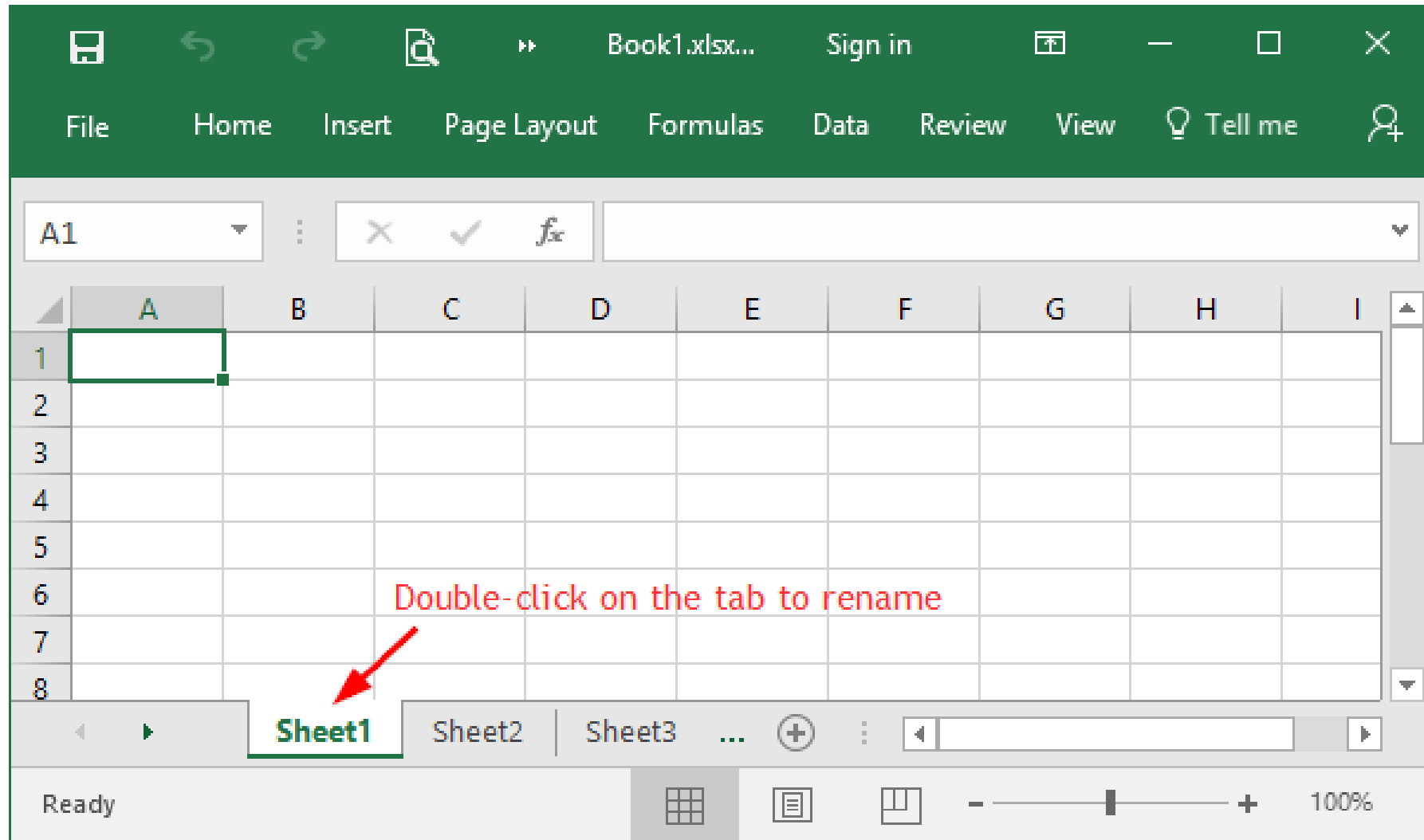
SUM $=\text{ROUNDUP}(+F50*(1+C4),0)$

	B	C	D	E	F	G
1	2018	2019	2020			
2	2.00%	1.50%	1.00%	max		
3	1.00%	1.00%	1.00%			
4	2.00%	2.00%	2.00%			
5	0.04%	0.04%	0.04%			
6	5.41%	5.41%	5.41%			
7	2.78%	2.78%	2.78%			
8	\$20,000,000	\$27,000,000	\$0			
9						
10	Township of Parsippany-Troy Hills					
11	Current Fund					
49						
50	23,637,821	25,160,668	26,529,793	28,169,482	28,732,872	$=\text{ROUNDUP}(+F50*(1+C4),0)$
51	22,454,141	21,400,494	21,810,416	21,431,979	21,646,299	21,862,762
52						
53	440,150	489,170	476,430	508,135	500,000	500,000
54						

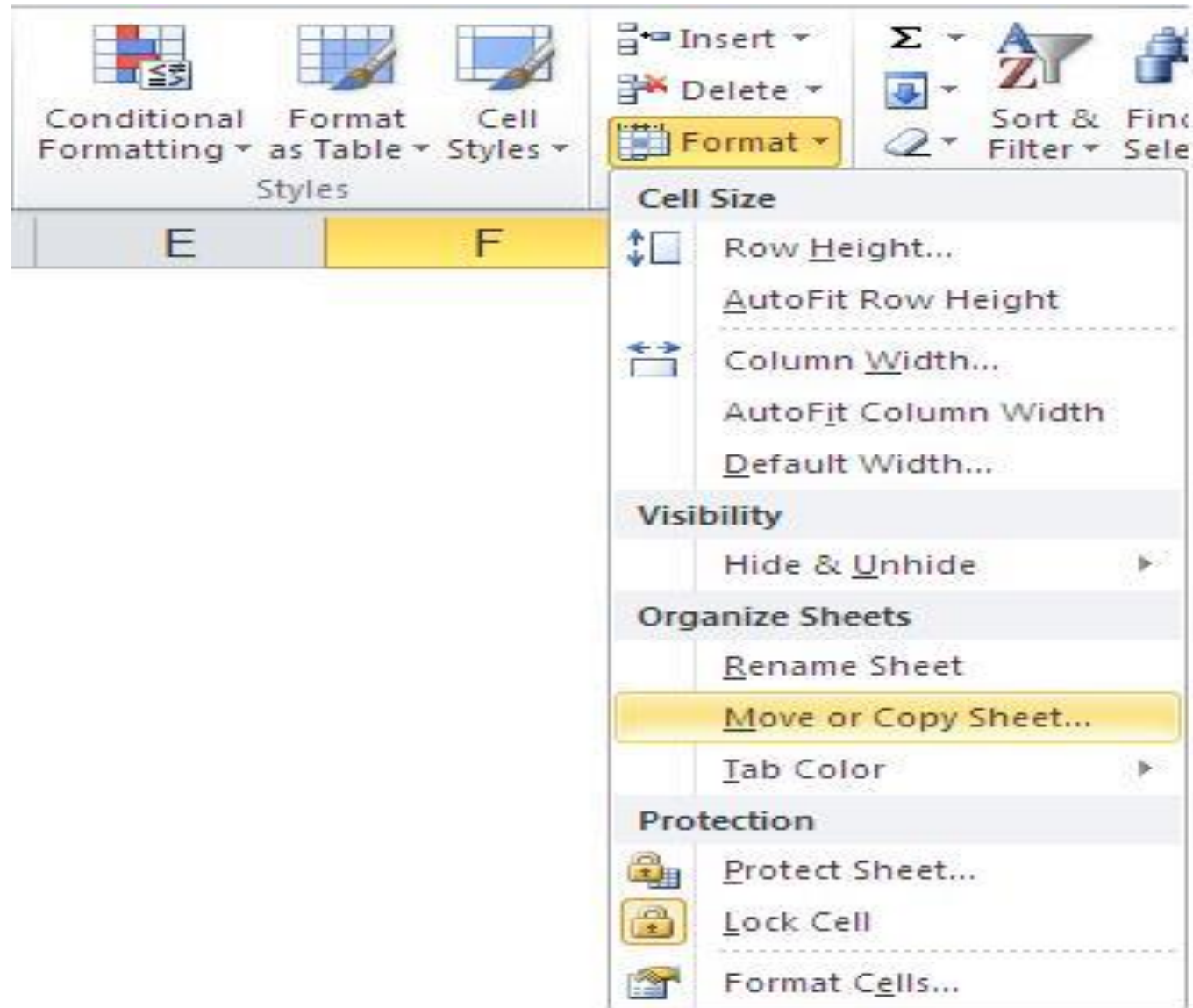
Current Water Sewer Golf

11:25 PM

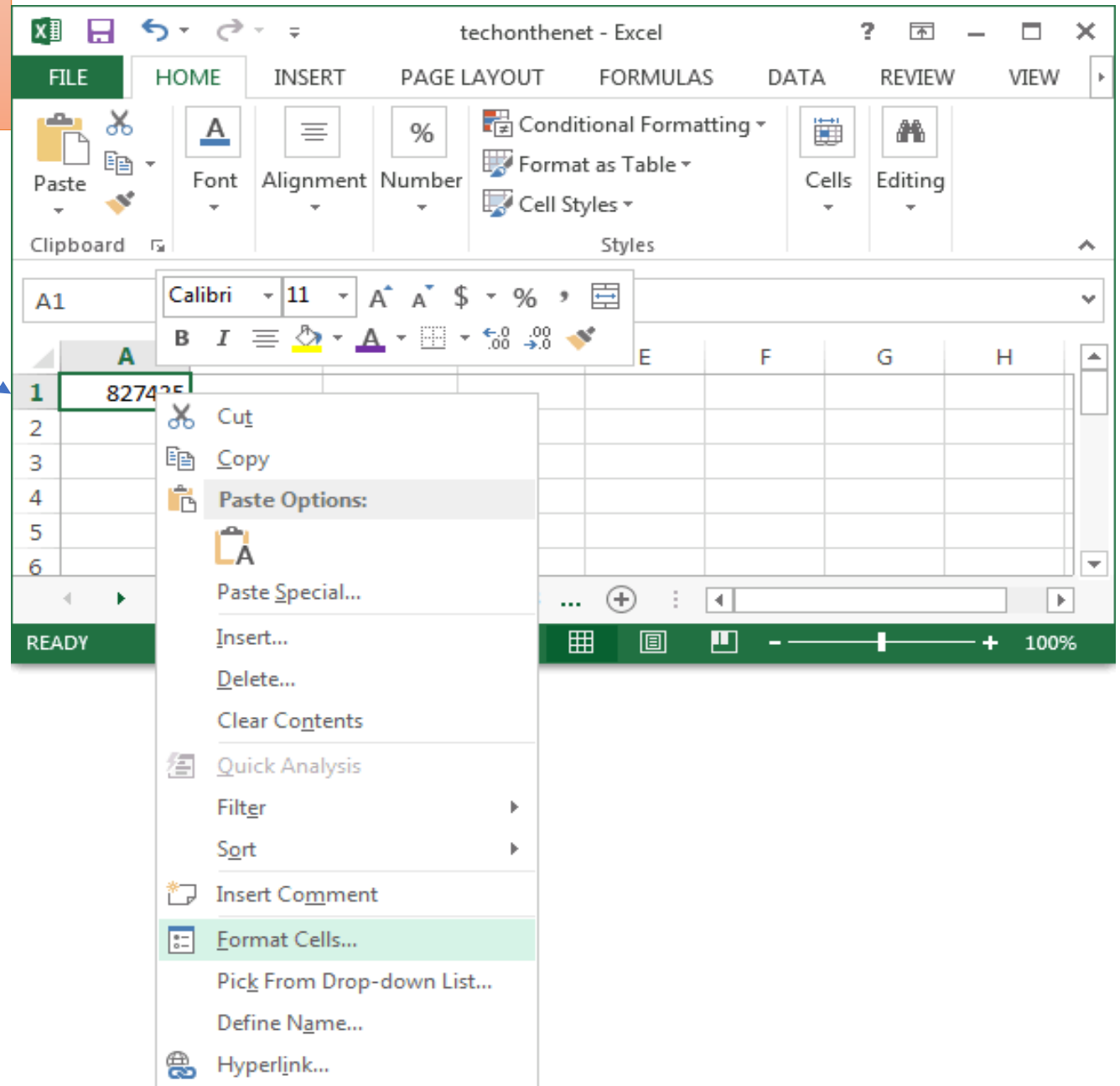
Double Click to Change a Tab Name



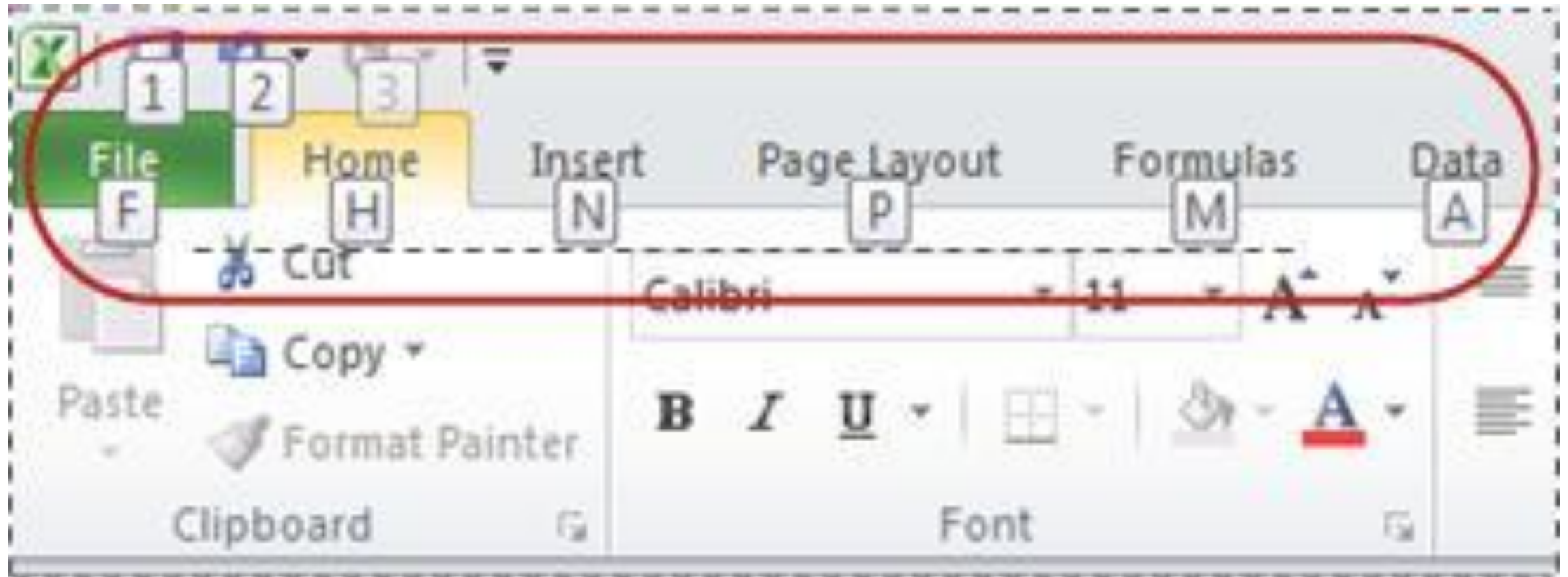
Copy a Sheet ~ Copies WITH Format



Right Click Menu



ALT Key to see “Key Tips”



Error Messages



Error Types

Error Type

When It Happens

#DIV/0!

When you divide by ZERO

#N/A!

When a formula or a function inside a formula cannot find the referenced data.

#NAME?

When the text in a formula is not recognized.

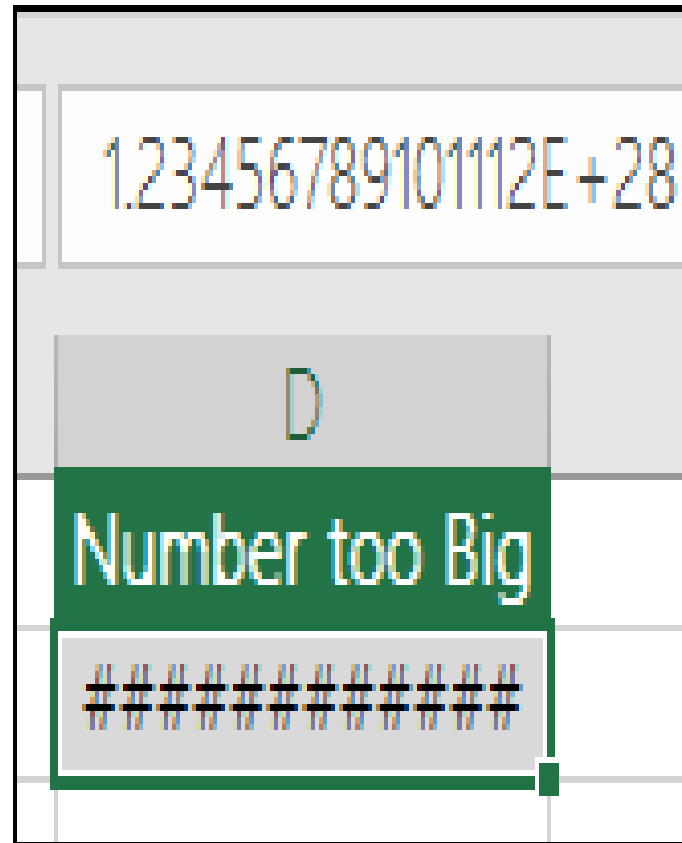
#NULL!

When a space was used instead of a comma in formulas that reference multiple ranges. A comma is necessary to separate range references.

Error Types

<i>Error Type</i>	<i>When It Happens</i>
#NUM!	When a formula has numeric data
#REF!	When a reference is invalid.
#VALUE!	When the wrong type of operand or function argument is used

#####




#DIV/0!

=IF(C2,B2/C2,0)				
B	C	D	E	
Numerator	Denominator	#DIV/0	Corrected	
1	0	#DIV/0!	0	

#N/A!

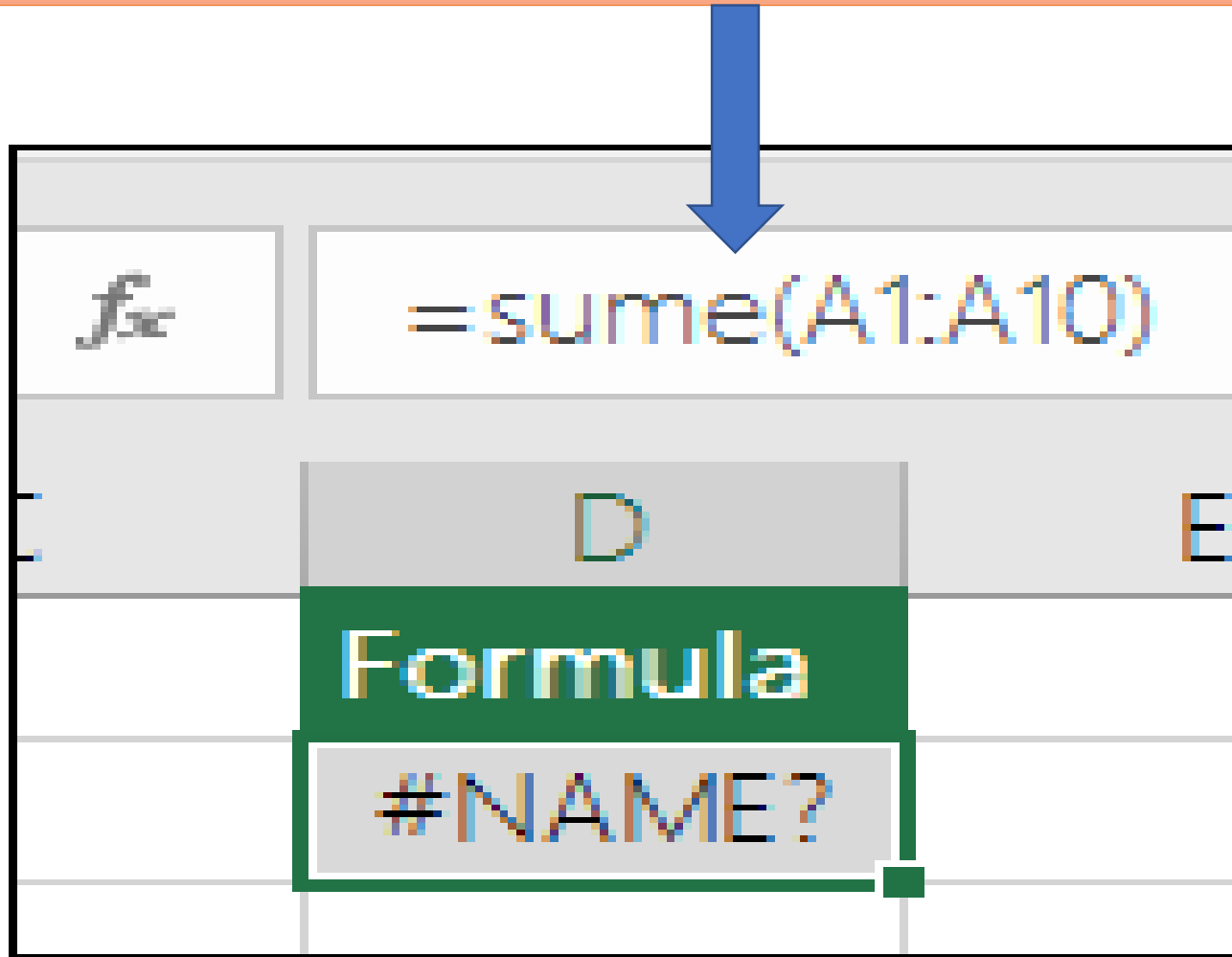
<code>=VLOOKUP(D2,\$D\$6:\$E\$8,2,TRUE)</code>		
D	E	F
Lookup Value	Price/Lb	
Banana	#N/A	
Pear	\$4.32	
Lookup Table	Price/Lb	
Pear	\$1.78	
Cherry	\$1.86	
Peach	\$4.32	



Excel displays this error when a value is not available to a function or formula.

`=IFERROR(VLOOKUP(D2,D6:E8,2,TRUE),0)`

#NAME?



#NULL

=SUM(C2:C3 E4:E6)



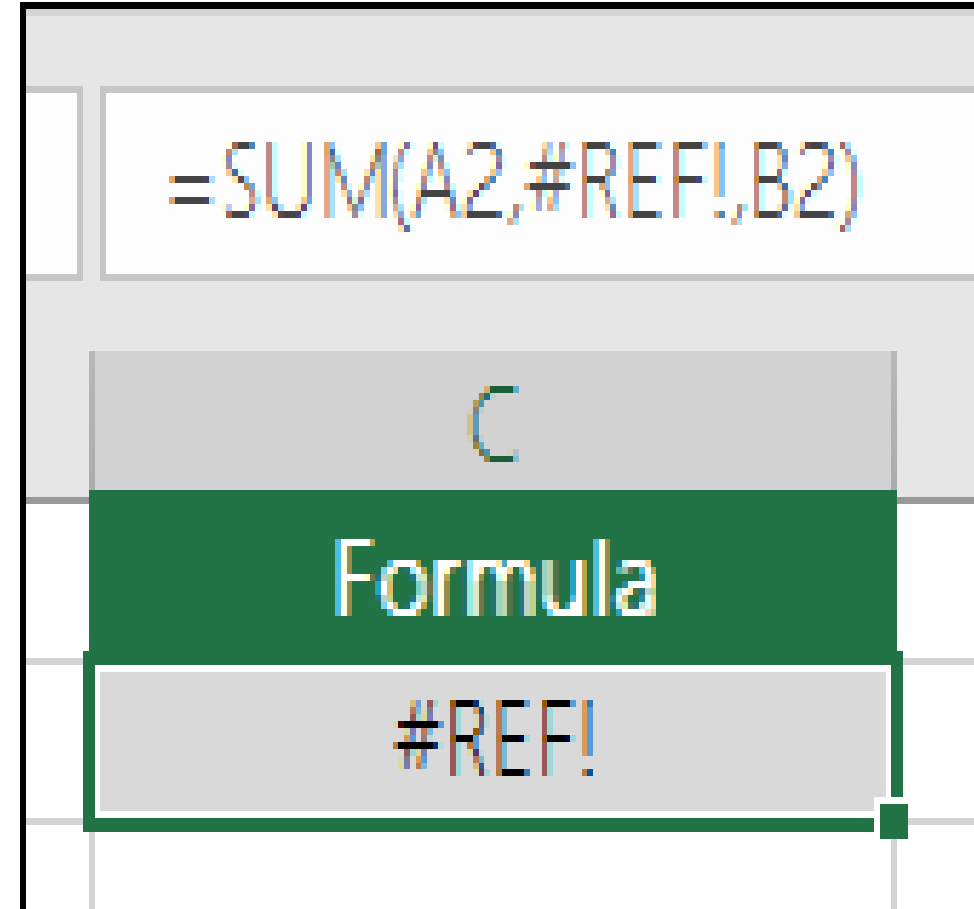
✓	<i>f_x</i>	=SUM(C2:C3 E4:E6)		
	C	D	E	
	Range 1			
	10			
	32			
			Range 2	
			6	
			24	
			7	
				#NULL!

#REF!

This can happen when you delete a row or column in error.

You can “undo” using Ctrl+Z or the undo on the formula bar.

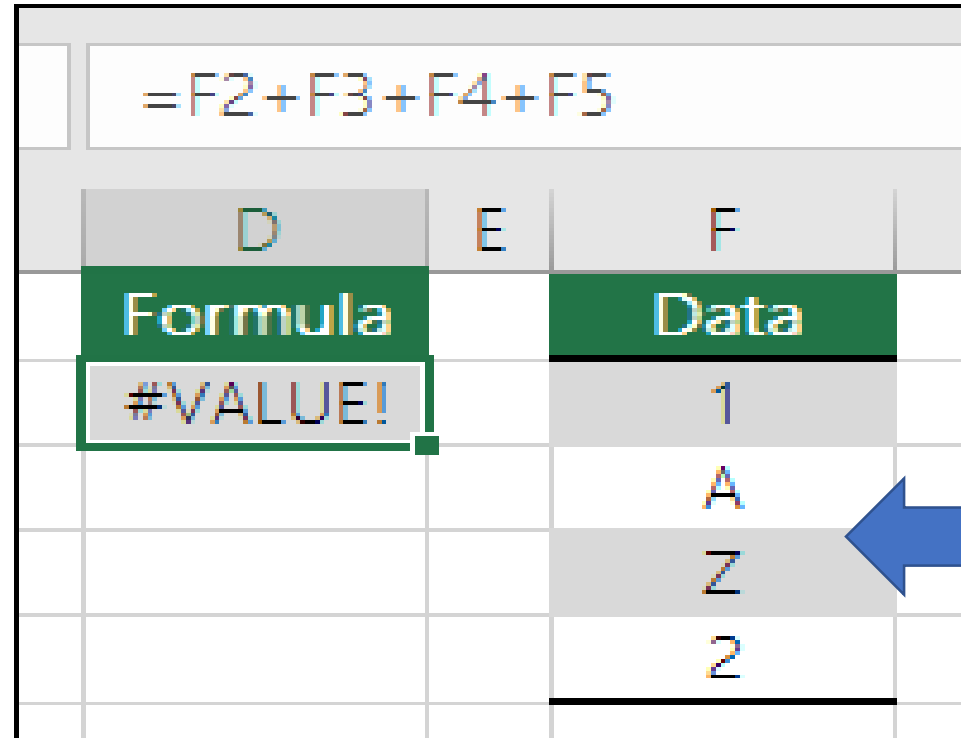
OR fix the formula to be “continuous” =SUM(A2:C2)



#VALUE!

This is displayed when a cell contains different types of data.

One way to fix this is to use
`=SUM(F2:F5)`



The image shows an Excel spreadsheet with a formula bar at the top containing `=F2+F3+F4+F5`. Below the formula bar is a grid of cells. Column D is labeled 'Formula' and column F is labeled 'Data'. Cell D2 contains the error `#VALUE!`, which is highlighted with a green border. Cell F2 contains the number '1', F3 contains 'A', F4 contains 'Z', and F5 contains '2'. A blue arrow points from the right towards cell F3, indicating that the presence of non-numeric data in the range causes the error.

	D	E	F
	Formula		Data
	#VALUE!		1
			A
			Z
			2

Absolute and Relative Referencing

- Absolute cell reference contains a (\$) in a Row and/or Column
 - Do not change when copied or filled
 - Use when you want to consistently refer to a certain cell

A1 **Relative**

A\$1 **Column is relative; Row is Constant**

\$A1 **Row is relative; Column is absolute**

\$A\$1 **BOTH are Absolute**

Order of Operations

- The Order of Operations tells Excel which **operation** to calculate first.
 1. Parenthesis
 2. Exponents
 3. Multiplication & Division
 4. Addition & Subtraction

Clipboard Font Alignment Number Styles Cells Editing

Paste Font Alignment Number Styles Cells Editing

Clipboard Font Alignment Number Styles Cells Editing

Clipboard Font Alignment Number Styles Cells Editing

G3 =B3+C3+D3+E3+F3+G3


A B C D E F G H I J K L M N O P Q R

Example of Circular Reference

10 20 3

3

Microsoft Excel

 There are one or more circular references where a formula refers to its own cell either directly or indirectly. This might cause them to calculate incorrectly.

Try removing or changing these references, or moving the formulas to different cells.

OK Help

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Error Checking..., Trace Error, Circular References, Watch, Calculation Options, Calculate Now, Calculate Sheet.

G3 =B3+C3+D3+E3+F3+G3

A B C D E F G H I J K L M N O P Q R

Example of Circular Reference

	10	20	30	40	50	0
--	----	----	----	----	----	---



Circular References \$G\$3

Common Formula Errors

Start with an “EQUAL SIGN” =

If you omit the equal sign, Excel thinks the data is “TEXT”

Match all open and closing parentheses

This gets more complicated as you add more formulas

*=IF(B5<0),”Not Valid”,B5*1.05) – EXTRA Parentheses after <0*

Use a colon to indicate a range

=SUM(A1:A5) not =SUM(A1 A5) returns #NULL

Common Formula Errors

Enter all required and correct type of arguments

Ex. Cannot combine SUM & REPLACE (Numerical vs Text)

Enter numbers without formatting

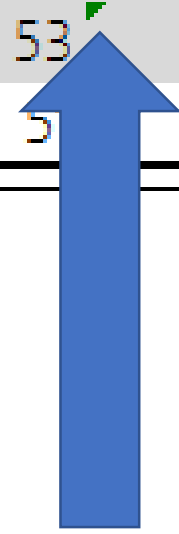
Ex. If you enter 1,000 into a formula vs 1000, it treats it like a comma separator looking at it like “1,000” or 1

CUT vs COPY

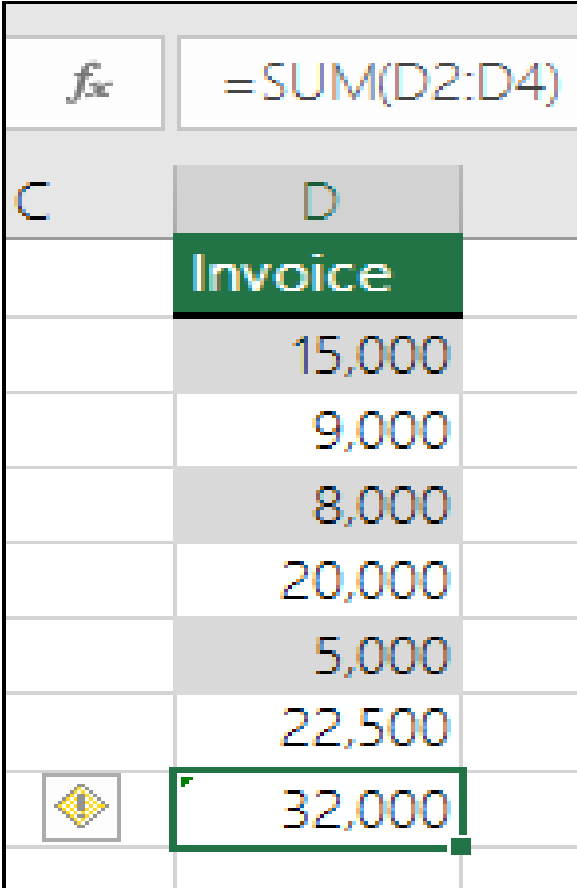
Relative vs Absolute

Formulas inconsistent with other formulas

	A	B	C	D	E
1	Data1	Data2	Data3	Sum	Formula
2	11	61	29	101	=SUM(A2:C2)
3	96	99	13	208	=SUM(A3:C3)
4	4	39	53	0	=SUM(A10:C10)
5	12	26	5	89	=SUM(A5:C5)



Formulas that omit cells in a group



The image shows an Excel spreadsheet with a formula bar at the top containing `=SUM(D2:D4)`. The spreadsheet has columns C and D. Row 2 is highlighted in green and contains the text "Invoice". Row 3 contains the value 15,000. Row 4 contains the value 9,000. Row 5 contains the value 8,000. Row 6 contains the value 20,000. Row 7 contains the value 5,000. Row 8 contains the value 22,500. Row 9 contains the value 32,000. A blue arrow points to the 32,000 value in cell D9. A yellow warning icon is visible in cell C9, indicating that the formula in the cell above (D8) is not calculating the value in D9 because it is hidden.

<i>f_x</i>	=SUM(D2:D4)
C	D
	Invoice
	15,000
	9,000
	8,000
	20,000
	5,000
	22,500
	32,000

Error Checking ~ Reset Ignored Errors

Error Checking

Enable background error checking

Indicate errors using this color:



Reset Ignored Errors

Formulas Referring To Empty Cells

The image shows an Excel spreadsheet with a formula bar at the top displaying `=AVERAGE(D2:D6)`. The spreadsheet has columns D and F. The data in column D is: Data1, 24, 12, (empty), 45, 10, and 22.75. The data in column F is: Data2, 24, 12, 0, 45, 10, and 18.2. The cell containing 22.75 is highlighted with a green border, and a blue arrow points to it from the left.

	D	E	F
	Data1		Data2
	24		24
	12		12
			0
	45		45
	10		10
	22.75		18.2

Error checking

The image shows a screenshot of an Excel spreadsheet. The formula bar at the top displays the formula `=SUM(A1 A10)`. In the spreadsheet grid, cell D2 contains the error message `#NULL!`. An "Error Checking" dialog box is open, displaying the following information:

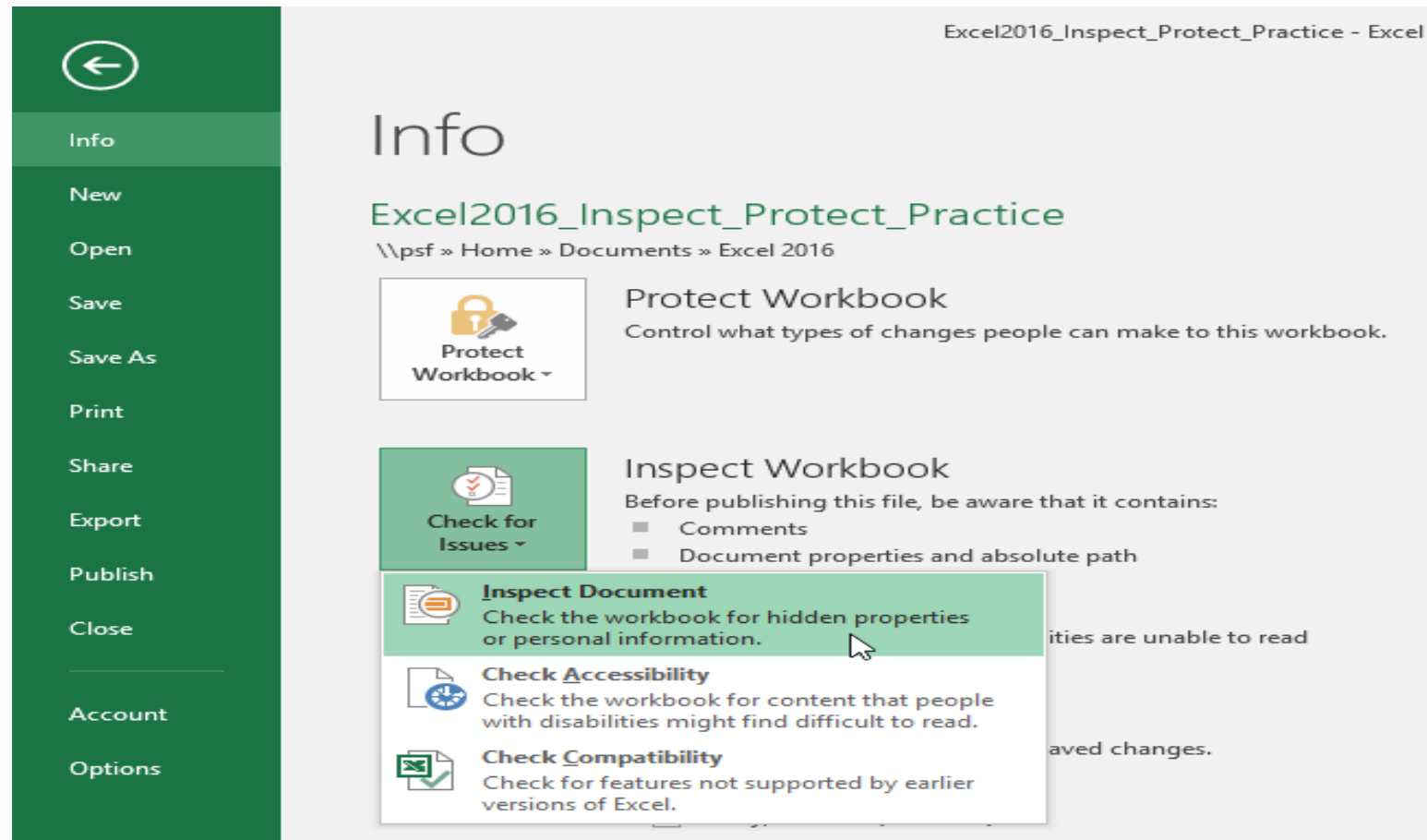
- Error in cell D2**
`=SUM(A1 A10)`
- Null Error**
The ranges in the formula do not intersect.

The dialog box includes several buttons for handling the error:

- Help on this error** (highlighted with a blue border)
- Show Calculation Steps...
- Ignore Error
- Edit in Formula Bar
- Options...
- Previous
- Next

Ways to AUDIT your Spreadsheet

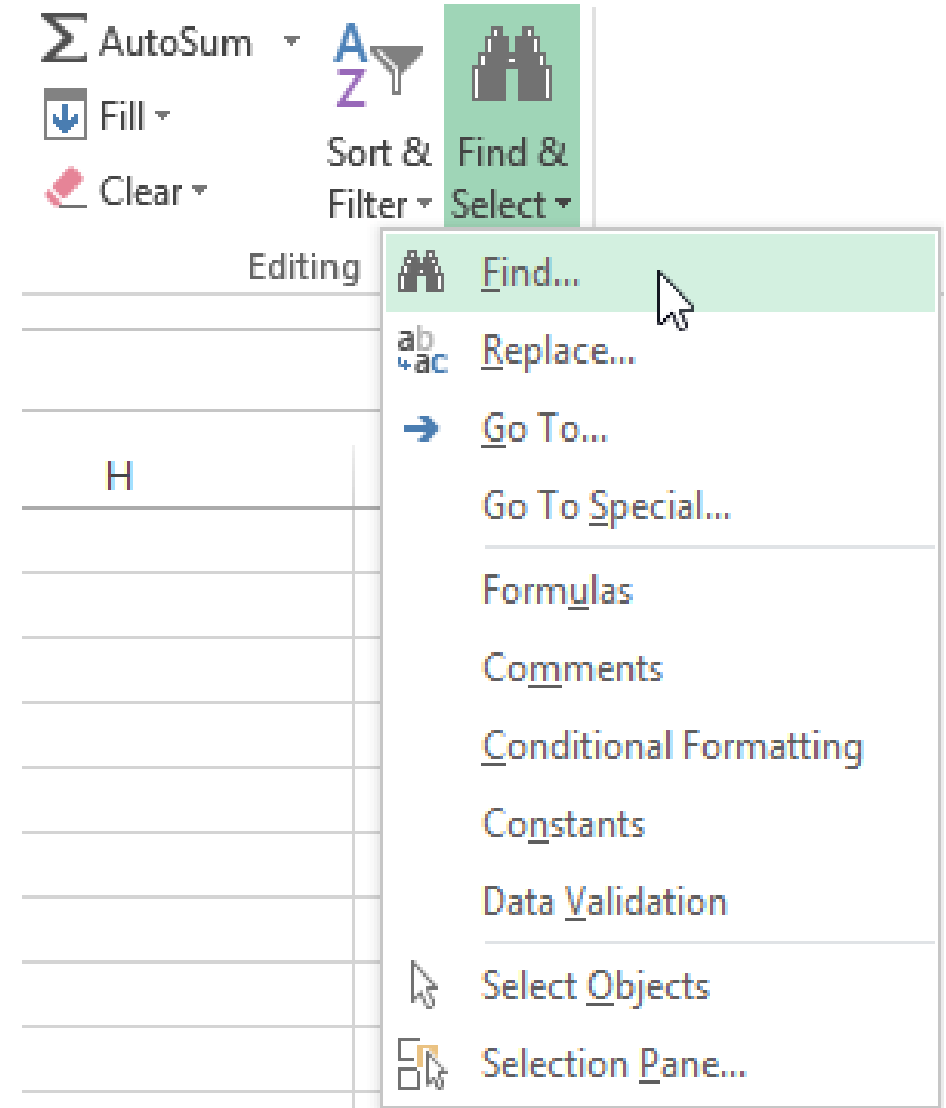
- **Inspect Workbook**



- **F2**

Find & Select

- Find & Select is found on the Home Tab
 - Find and replace
 - Find Formulas, Comments, etc



Trace Precedents/Dependents

Trace Precedents.xlsx - Excel

File Home Insert Layout References Formulas Data Review View Tell me what you want to do

More Functions Name Manager Defined Names

Trace Precedents Trace Dependents Remove Arrows Show Formulas Error Checking Evaluate Formula Watch Window

2016 Revenue Projection

	H	I	J	K
	2016 Revenue Projection			
Q1		\$ 118,125.00		
Q2		\$ 116,602.50		
Q3		#VALUE!		
Q4		\$ 112,980.00		

Trace Dependents

Show arrows that indicate which cells are affected by the value of the currently selected cell.

10	
2	20
3	30
4	40
5	50

Watch Window

- Used when cells and their formulas are not visible on a worksheet.
- On large spreadsheets, you don't have to repeatedly go to different parts of your spreadsheet to confirm formula calculations.



Add cells to the Watch Window

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File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Watch Window, Calculation Options, Calculate Now, Calculate Sheet

Formula Bar: F9

	B	C	D	E	F	G	H
1	2018	2019	2020				
2	2.00%	1.50%	1.00%	max			
3	1.00%	1.00%	1.00%				
4	2.00%	2.00%	2.00%				
5	0.04%	0.04%	0.04%				
6	5.41%	5.41%	5.41%				
7	2.78%	2.78%	2.78%				
8	\$20,000,000	\$27,000,000	\$0				
9							
10	Township of Parsippany-Troy Hills						
11	Current Fund						
12	Actual			Anticipated	Projected		
13	2014	2015	2016	2017	2018	2019	2020
42				78,000	300,000	300,000	300,000
43	1,237,602	1,286,405	1,232,504	1,278,301	1,275,000	1,275,000	1,275,000
44	41,797,594	42,453,686	43,989,470	42,778,836	43,986,974	45,018,229	46,142,000
45	2,827,742	2,830,040	2,828,004	2,871,017	2,883,737	2,894,537	2,894,000
46	65,840,657	67,798,154	70,966,557	69,796,184	70,828,912	71,875,967	73,005,000

Watch Window

Add Watch... Delete Watch

Book	Sheet	Name	Cell	Value	Formula

Current Water Sewer Golf

Specify What You Want to “Watch”

3 Year Forecast 2017 - Excel

Ann Cucci

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Defined Names, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Formula Auditing, Watch Window, Calculation Options, Calculate Now, Calculate Sheet, Calculation

F44: =F74-(SUM(F15:F43)+F45)

	B	C	D	E	F	G	H
1	2018	2019	2020				
2	2.00%	1.50%	1.00%	max			
3	1.00%	1.00%					
4	2.00%	2.00%					
5	0.04%	0.04%					
6	5.41%	5.41%					
7	2.78%	2.78%					
8	\$20,000,000	\$27,000,000	\$0				
9							
10	Township of Parsippany-Troy Hills						
11	Current Fund						
12	Actual			Anticipated		Projected	
13	2014	2015	2016	2017	2018	2019	2020
42				78,000	300,000	300,000	300,000
43	1,237,602	1,286,405	1,232,504	1,278,301	1,275,000	1,275,000	1,275,000
44	41,797,594	42,453,686	43,989,470	42,778,836	43,986,974	45,018,229	46,142,000

Add Watch dialog box: Select the cells that you would like to watch the value of: =Current!\$F\$44:\$H\$44

Watch Window dialog box: Add Watch... Delete Watch

Now I can see how changes effect amount to be raised no matter where I go in the sheet

3 Year Forecast 2017 - Excel

Ann Cucci

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Watch Window, Calculation Options, Calculate Now, Calculate Sheet

H4

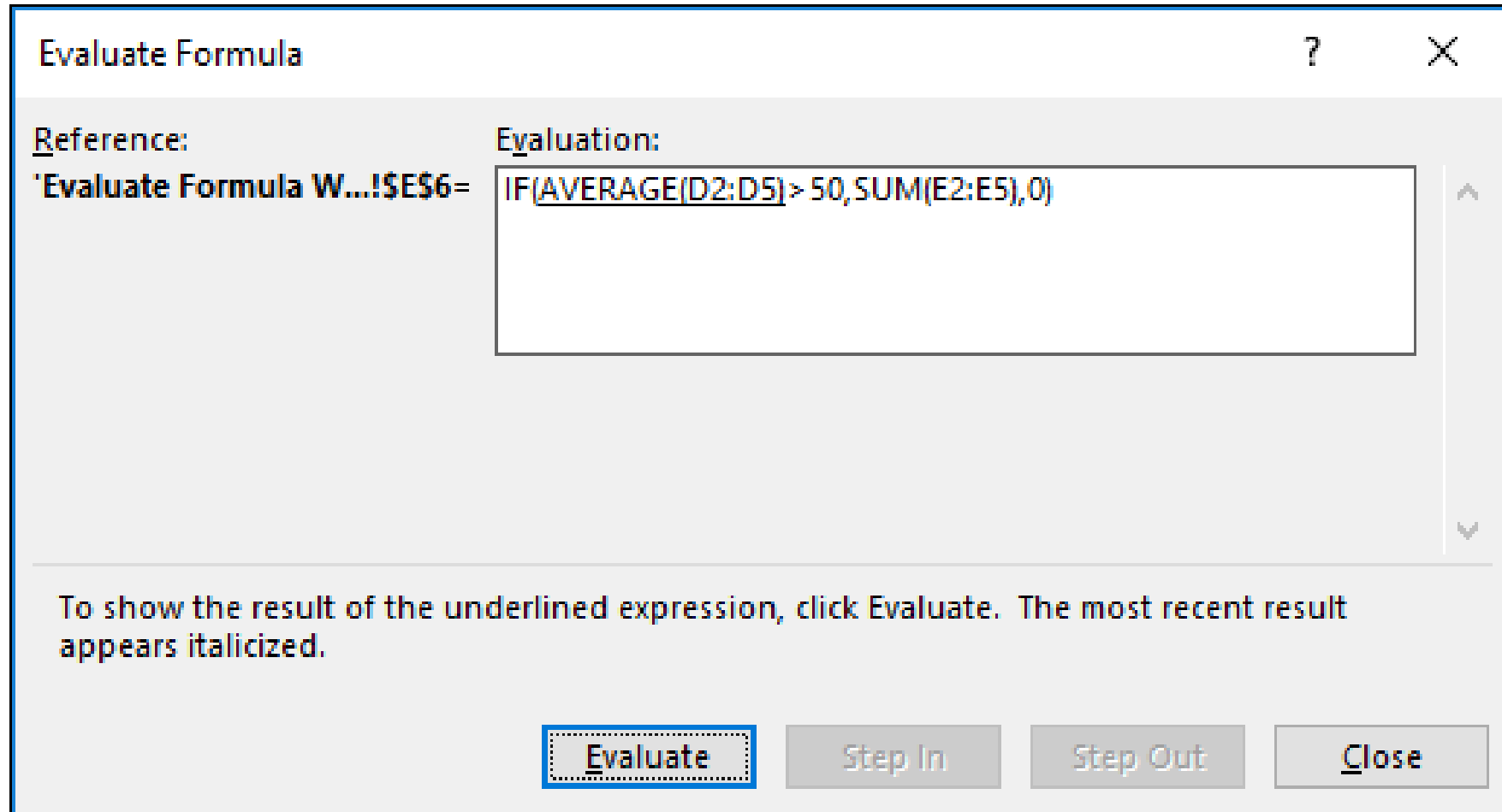
	C	D	E	F	G	H	I
1		2019	2020				
2		1.50%	1.00%	max			
3		1.00%	1.00%				
4		2.00%	2.00%				
5		0.04%	0.04%				
6		5.41%	5.41%				
7		2.78%	2.78%				
8		\$27,000,000	\$0				
9							
10	Township of Parsippany-Troy Hills						
11	Current Fund						
12	Actual		Anticipated	Projected			
13	2015	2016	2017	2018	2019	2020	
14							
15	3.717.448	3.700.000	3.700.000	3.700.000	3.700.000	3.700.000	

Watch Window

Add Watch... Delete Watch

Book	Sheet	Name	Cell	Value	Formula
3 Year Fo...	Current		F44	43,986,974	=F74-(SUM(F15:F43)+F45)
3 Year Fo...	Current		G44	45,018,229	=G74-(SUM(G15:G43)+G45)
3 Year Fo...	Current		H44	46,142,672	=H74-(SUM(H15:H43)+H45)

Evaluate Formula



Evaluate Formula

AutoSave Off | 3 Year Forecast 2017 - Excel | Ann Cucci

File Home Insert Draw Page Layout **Formulas** Data Review View Tell me what you want to do

Insert Function | AutoSum | Recently Used | Financial | Logical | Text | Date & Time | Lookup & Reference | Math & Trig | More Functions | Name Manager | Define Name | Use in Formula | Create from Selection | Trace Precedents | Trace Dependents | Remove Arrows | Show Formulas | Error Checking | Evaluate Formula | Watch Window | Calculation Options | Calculate Now | Calculate Sheet

F47 | =IF(E44*(1+B2)<=F44,"= or under 2%","over 2%")

Evaluate Formula

Reference: **Current!\$F\$47**

Evaluation:
 = IF(E44*(1+B2)<=F44,"= or under 2%","over 2%")

To show the result of the underlined expression, click Evaluate. The most recent result appears italicized.

	B	C		G	H
1	2018	2019			
2	2.00%	1.50%			
3	1.00%	1.00%			
4	2.00%	2.00%			
5	0.04%	0.04%			
6	5.41%	5.41%			
7	2.78%	2.78%			
8	\$20,000,000	\$27,000,000			

Township of Parsippany-Troy Hills Current Fund

	Actual			Anticipated	Projected		
	2014	2015	2016	2017	2018	2019	2020
44	41,797,594	42,453,686	43,989,470	42,778,836	43,986,974	45,018,229	46,142,672
45	<u>2,827,742</u>	<u>2,830,040</u>	<u>2,828,004</u>	2,871,017	<u>2,883,737</u>	<u>2,894,537</u>	<u>2,894,537</u>
46	65,840,657	67,798,154	70,966,557	69,796,184	70,828,912	71,875,967	73,005,410
47					= or under 2%	= or under 1.5%	= or under 1%

Function Library: fx, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Watch Window, Calculation Options, Calculate Now, Calculate Sheet.

Formula Bar: =IF(E44*(1+B2)<=F44,"= or under 2%","over 2%")

	B	C
1	2018	2019
2	2.00%	1.50%
3	1.00%	1.00%
4	2.00%	2.00%
5	0.04%	0.04%
6	5.41%	5.41%
7	2.78%	2.78%
8	\$20,000,000	\$27,000,000

Evaluate Formula

Reference: **Current!\$F\$47**

Current!\$F\$47 = IF(42778835.6972057*(1+B2)<=F44,"= or under 2%","over 2%")

To show the result of the underlined expression, click Evaluate. The most recent result appears italicized.

Township of Parsippany-Troy Hills

Current Fund

	Actual			Anticipated	Projected		
	2014	2015	2016	2017	2018	2019	2020
4	41,797,594	42,453,686	43,989,470	42,778,836	43,986,974	45,018,229	46,142,672
5	2,827,742	2,830,040	2,828,004	2,871,017	2,883,737	2,894,537	2,894,537
6	65,840,657	67,798,154	70,966,557	69,796,184	70,828,912	71,875,967	73,005,410
7					= or under 2%	= or under 1.5%	= or under 1%

No Formulas

3 Year Forecast 2017 - Excel

Ann Cucci

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions

Formula Auditing: Define Name, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Watch Window

Calculation: Calculate Now, Calculate Sheet

D23: 136371

	E	F	G	
44	42,778,836	43,986,974	45,018,229	4
45	2,871,017	<u>2,883,737</u>	<u>2,894,537</u>	
46	69,796,184	70,828,912	71,875,967	7
47		= or under 2%	= or under 1.5%	= or u
48				
49				
50	28,169,482	28,732,872	29,307,530	2
51	21,431,979	21,646,299	21,862,762	2
52				
53	508,135	500,000	500,000	

Ready

Current Water Sewer Golf

12:47 PM 9/23/2017

Show Formulas

The screenshot shows the Microsoft Excel interface with the 'Formulas' ribbon selected. The spreadsheet displays formulas in columns F and G, rows 44 through 57. The formulas are as follows:

	F	G
44	=F74-(SUM(F15:F43)+F45)	=G74-(SUM(G15:G43)+G45)
45	=ROUNDDOWN(+F79*B5,0)	=ROUNDDOWN(+G79*C5,0)
46	=SUM(F15:F45)	=SUM(G15:G45)
47	=IF(E44*(1+B2)<=F44,"= or under 2%","over 2%")	=IF(F44*(1+C2)<=G44,"= or under 1.5%","over 1.5%")
48		
49		
50	=ROUNDUP(+E50*(1+B4),0)	=ROUNDUP(+F50*(1+C4),0)
51	=ROUNDUP(+E51*(1+B3),0)	=ROUNDUP(+F51*(1+C3),0)
52		
53	500000	500000
54		
55	4335000	=3330000+1035000
56	=3200000-52000	=3214300-52000
57	100000	200000

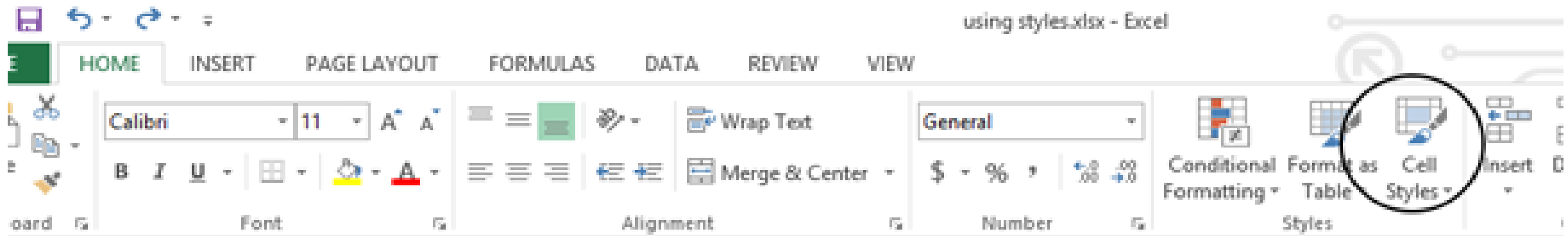
The bottom of the screenshot shows the Windows taskbar with the search bar, taskbar icons, and system tray showing the time as 12:44 PM on 9/23/2017.

Formatting



Built in Styles

If the screen is narrow:



If the screen is wide:



Do I want Gridlines???

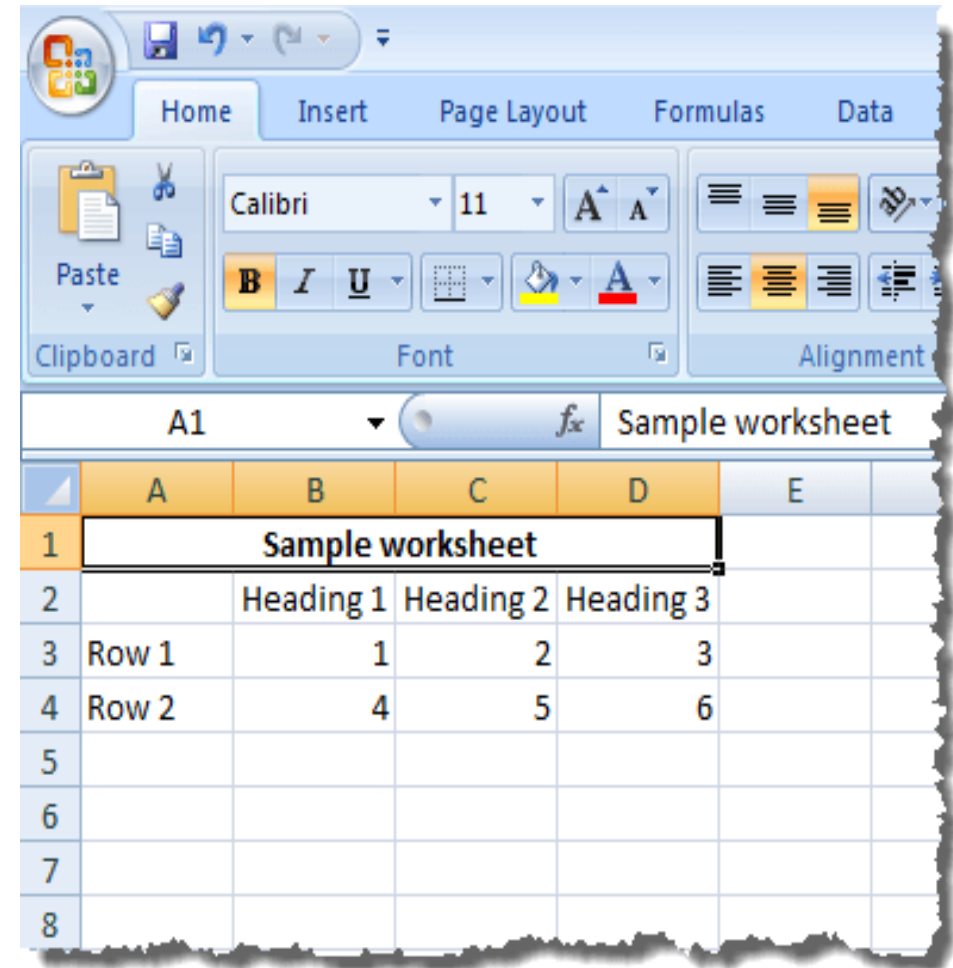
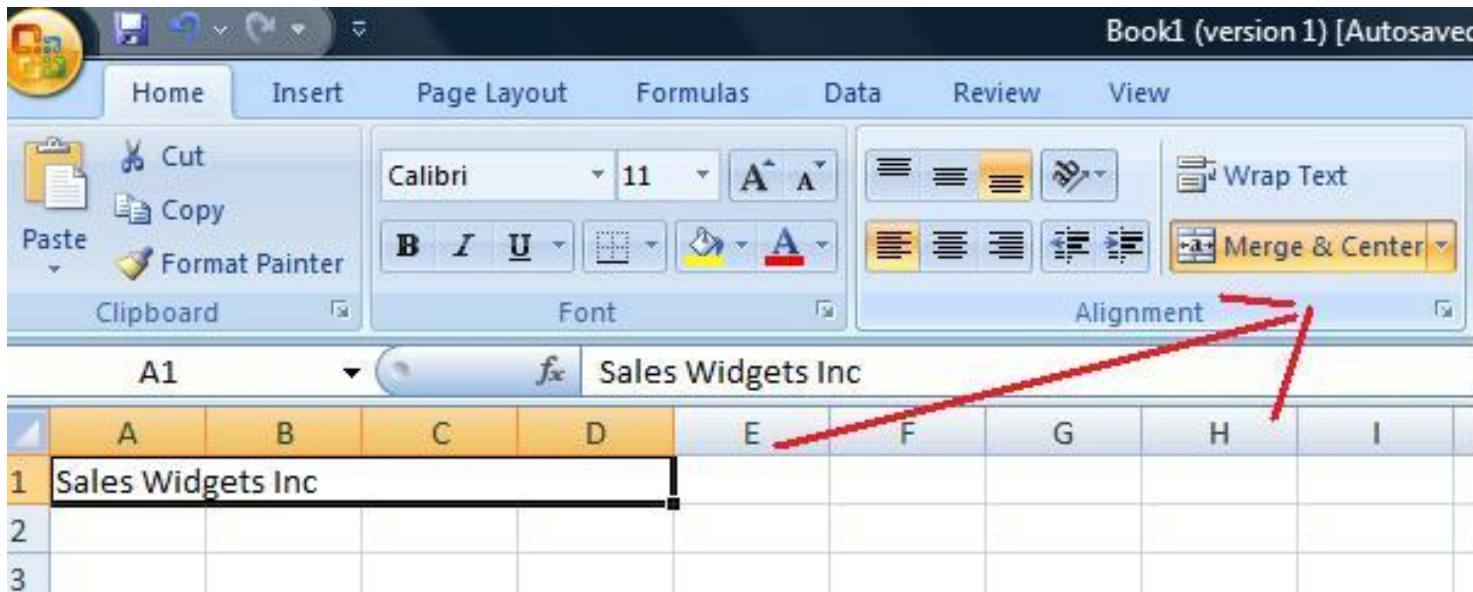
On the **View** tab, in the **Show** group, clear the **Gridlines** check box.

<input checked="" type="checkbox"/> Ruler	<input checked="" type="checkbox"/> Formula Bar
<input checked="" type="checkbox"/> Gridlines	<input checked="" type="checkbox"/> Headings
Show	

	A	B	C
1	Sales Person	Number Sold	Unit Price
2	Barnhill	5	2200
3	Smith	4	1800
4	Ingle	6	2300
5	Lysaker	8	1700
6	Jordan	3	2000

	A	B	C
1	Sales Person	Number Sold	Unit Price
2	Barnhill	5	2200
3	Smith	4	1800
4	Ingle	6	2300
5	Lysaker	8	1700
6	Jordan	3	2000

Merge & Center

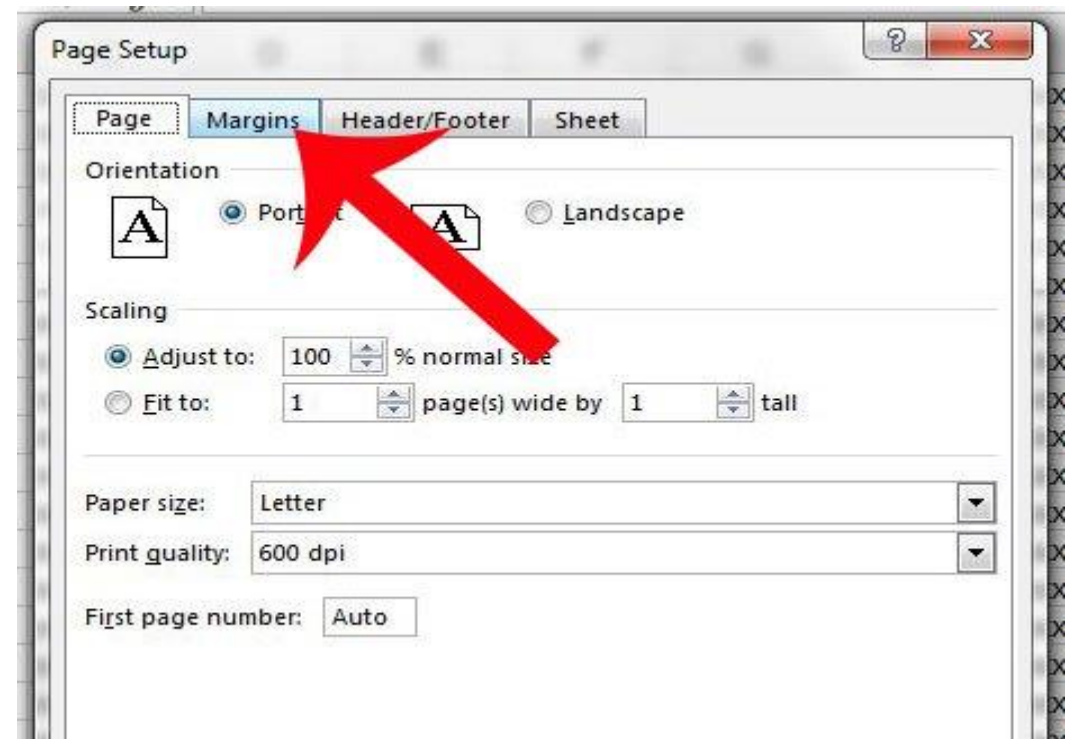
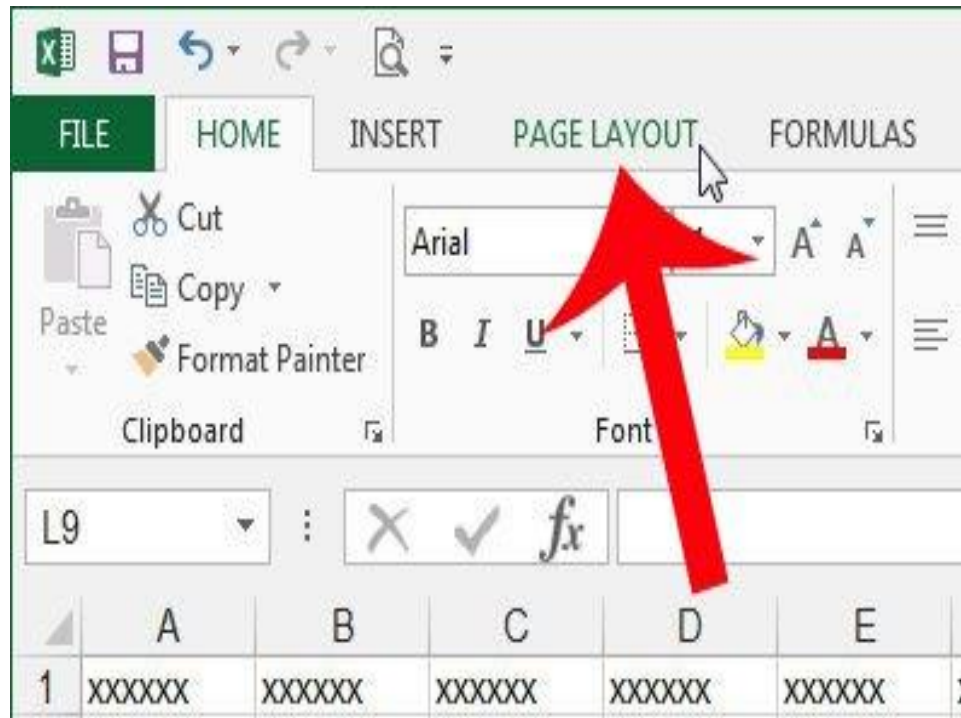


Pet PEVES (for me)

- Not Saving Your Spreadsheet at A1 (or at the beginning)
- Centering Numbers
- Different Fonts
- No Labels
- Not doing the formula in Excel
- Inconsistent Number formats
- Putting a number into a spreadsheet then making the font “white” so it’s hidden.
- Manual indenting vs using the indent function



File Names & Printing...



Footer:

- From Page Setup

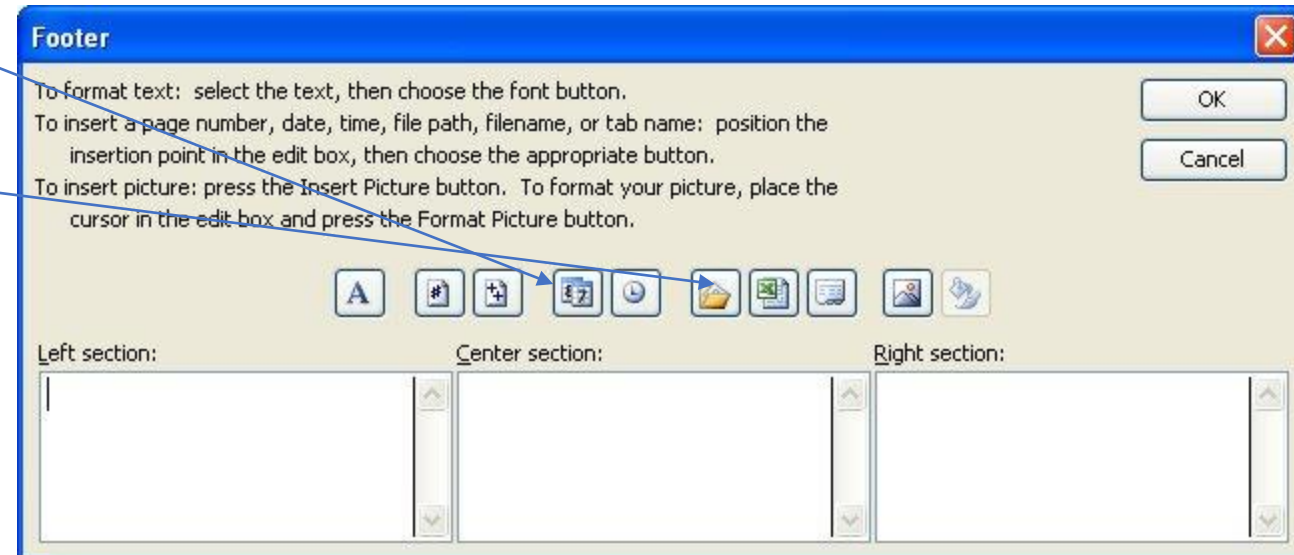
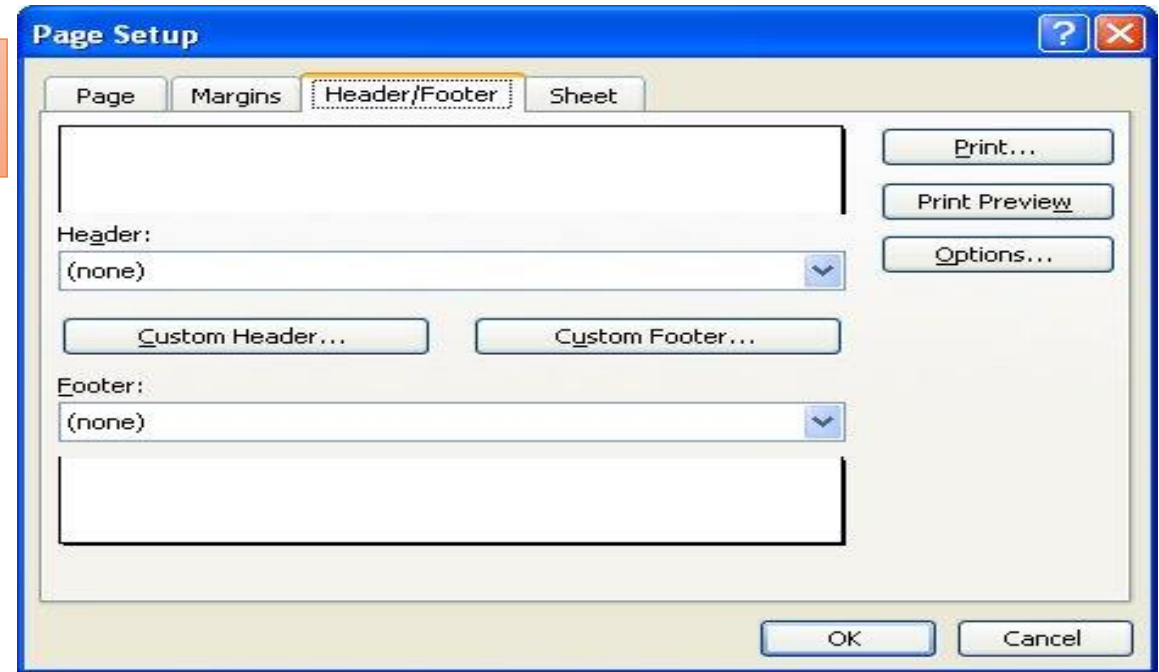
- I add the Date

- `&[Date]` = 9/27/2017

- File name & path

- `&[Path]&[File]` =

E:\Par Troy\Budget\Knoll Revenue

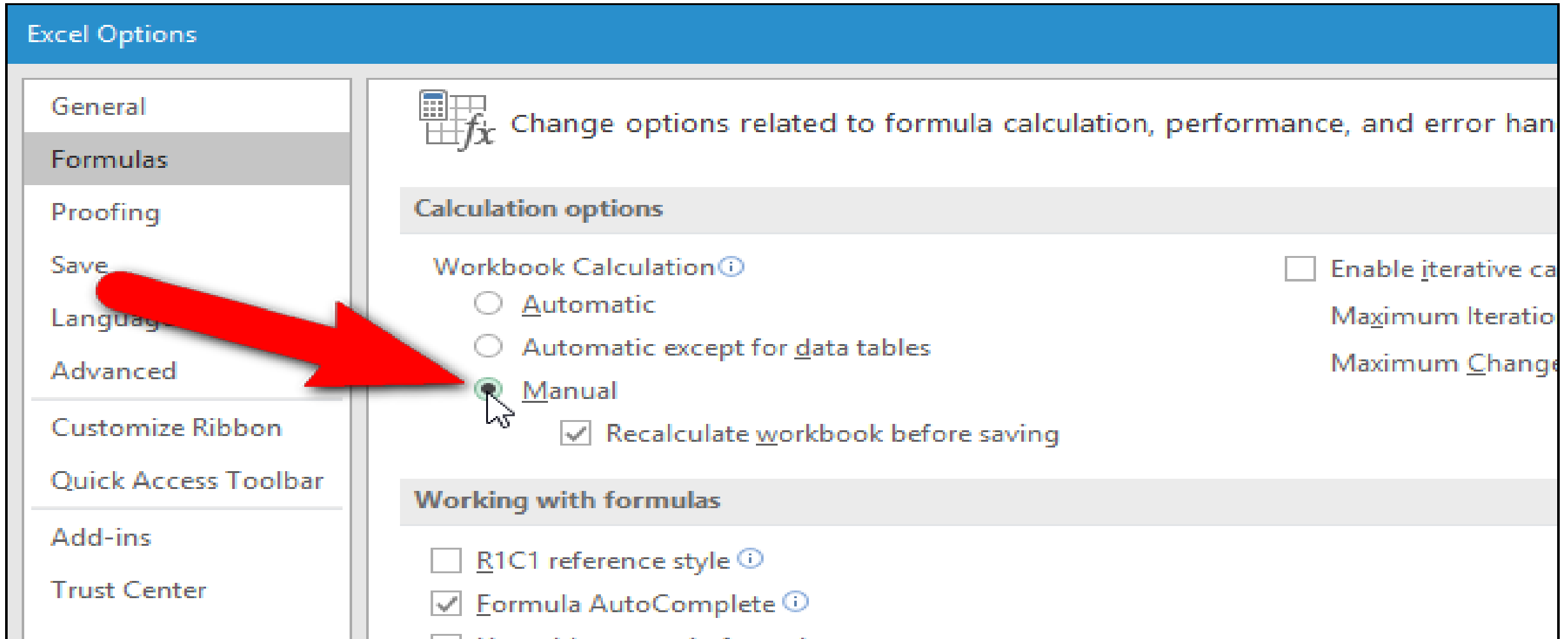


Ways to Screw up your spreadsheet

- **The sheet has a million rows and I'm going to fill them all!!!!!!!!!!!!!!**
 - *There are 1,048,576 rows and 16,384 columns*
- **I know a few blank cells won't matter**
- **I put as much as possible in each cell!**
 - *Good example is names – first & last...break data into the smallest reasonable pieces.*
- **I did it myself!**
 - *Can build from a template or someone else's spreadsheet*
- **I love to jazz up my spreadsheets with WordArt**
- **I put everything on Sheet1 so it's easy to find**
- **I put everything on a whole bunch of sheets**

Ways to Screw up your spreadsheet

- I set all my sheets to manual to speed things up!



The screenshot shows the 'Excel Options' dialog box with the 'Formulas' tab selected. The 'Calculation options' section is visible, showing three radio buttons for 'Workbook Calculation': 'Automatic', 'Automatic except for data tables', and 'Manual'. A red arrow points to the 'Manual' radio button, which is currently selected. Below these options, there is a checked checkbox for 'Recalculate workbook before saving'. The 'Working with formulas' section below shows 'R1C1 reference style' unchecked and 'Formula AutoComplete' checked.

Excel Options

General

Formulas

Proofing

Save

Language


Advanced

Customize Ribbon

Quick Access Toolbar

Add-ins

Trust Center

 Change options related to formula calculation, performance, and error handling

Calculation options

Workbook Calculation ⓘ

Automatic

Automatic except for data tables

Manual

Recalculate workbook before saving

Enable iterative calculation

Maximum Iterations: 1000

Maximum Change: 0.0000000000000001

Working with formulas

R1C1 reference style ⓘ

Formula AutoComplete ⓘ

Quick Analysis:

Knoll Revenue - Excel

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

B5 3479249.6

	A	B	C	D
4		<u>2010</u>	<u>2011</u>	<u>2012</u>
5	Golf Fees	\$ 3,479,250	\$ 3,122,466	\$ 3,387,093
6	Concession Rent	1,316,354	1,341,554	779,154
7	Concession Utilities	26,173	18,734	15,429
8	Concession Garbage	18,000	15,000	18,000
9	Room Rental/Utilities	14,350	15,033	15,011
10	Interest on Investments			4,685
11	Misc			674
12	TOTAL REVENUE	\$ 4,877,768	\$ 4,522,999	\$ 4,220,046

Formatting | Charts | **Totals** | Tables | Sparklines

Sum Average Count % Total Running Total Sum

Formulas automatically calculate totals for you.

1 using cell styles using menu formatting using format table trend analysis Sparklines

Ready Average: \$696,834 Count: 7 Sum: \$4,877,768

Clipboard: Paste, Copy, Paste with styles, Format Painter

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color, Font Color

Alignment: Wrap Text, Merge & Center, Left, Right, Center, Justify

Number: General, Currency (\$), Percentage (%), Comma, Thousand Separator, Negative numbers in parentheses, Number of decimal places

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

A2 Sales by Year

	A	B	C	D	E	F	G	H	I
1	Golf Utility								
2	Sales by Year								
3									
4		2010	2011	2012	2013	2014	2015	2016	2017*
5	Golf Fees	3479249.60	3122466.00	3387092.86	3231740.71	3055755.53	3095490.00	3151406.00	28329
6	Concession Rent	1316353.81	1341554.00	779154.00	660000.00	660000.00	660000.00	660000.00	4100
7	Concession Utilities	26172.94	18733.54	15428.88	16203.81	21467.39	34603.43	24657.85	485
8	Concession Garbage	18000.00	15000.00	18000.00	18000.00	16500.00	6000.00	9000.00	100
9	Room Rental/Utilities	14349.50	15032.75	15011.24	15636.00	15770.00	7172.00	0.00	
10	Interest on Investments	21400.73	8491.68	4685.10	6719.90	10852.49	8159.00	18183.00	175
11	Misc	<u>2241.50</u>	<u>1721.38</u>	<u>674.25</u>	<u>906.75</u>	<u>963.75</u>	<u>1442.00</u>	<u>1282.60</u>	<u>8</u>
12	TOTAL REVENUE	<u>4877768.08</u>	<u>4522999.35</u>	<u>4220046.33</u>	<u>3949207.17</u>	<u>3781309.16</u>	<u>3812866.43</u>	<u>3864529.45</u>	<u>33199</u>
13									
14									
15									
16									
17									
18									
19									
20									
21									

Merge & Center

AutoSave Off Knoll Revenue - Excel Ann Cucci

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 Bold Italic Underline Merge & Center

General \$ % , .0 .00

Conditional Formatting Format as Table Cell Styles Insert Delete Format

AutoSum Fill Clear Sort & Filter Find & Select

A1 Golf Utility

Merge & Center

Combine and center the contents of the selected cells in a new larger cell.

This is a great way to create a label that spans multiple columns.

[Tell me more](#)

	A	B	C	D	E	F
1						
2	Sales by Year					
3						
4			2010	2011	2012	2013
5	Golf Fees	3479249.60	3122466.00	3387092.86	3231740.71	305
6	Concession Rent	1316353.81	1341554.00	779154.00	660000.00	66
7	Concession Utilities	26172.94	18733.54	15428.88	16203.81	2
8	Concession Garbage	18000.00	15000.00	18000.00	18000.00	1
9	Room Rental/Utilities	14349.50	15032.75	15011.24	15636.00	1
10	Interest on Investments	21400.73	8491.68	4685.10	6719.90	1
11	Misc	<u>2241.50</u>	<u>1721.38</u>	<u>674.25</u>	<u>906.75</u>	
12	TOTAL REVENUE	4877768.08	4522999.35	4220046.33	3949207.17	378

Using the Format Menu on the Ribbon

Knoll Revenue - Excel

Ann Cucci

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

AutoSave Off

Calibri 11 A A

B I D Merge & Center

General

\$ % , .0 .00 .0

Conditional Formatting Format as Table Cell Styles

Insert Delete Format

AutoSum Fill Clear

Sort & Filter Find & Select

A1 Golf Utility

	A	B	C	D	E	F	G
1	Golf Utility						
2	Sales by Year						
3							
4		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
5	Golf Fees	\$ 3,479,250	\$ 3,122,466	\$ 3,387,093	\$ 3,231,741	\$ 3,055,756	\$ 3,095,4
6	Concession Rent	1,316,354	1,341,554	779,154	660,000	660,000	660,0
7	Concession Utilities	26,173	18,734	15,429	16,204	21,467	34,6
8	Concession Garbage	18,000	15,000	18,000	18,000	16,500	6,0
9	Room Rental/Utilities	14,350	15,033	15,011	15,636	15,770	7,1
10	Interest on Investments	21,401	8,492	4,685	6,720	10,852	8,1
11	Misc	<u>2,242</u>	<u>1,721</u>	<u>674</u>	<u>907</u>	<u>964</u>	<u>1,4</u>
12	TOTAL REVENUE	<u>\$ 4,877,768</u>	<u>\$ 4,522,999</u>	<u>\$ 4,220,046</u>	<u>\$ 3,949,207</u>	<u>\$ 3,781,309</u>	<u>\$ 3,812,8</u>
13							
14							

Completed | 1 | using cell styles | using menu formatting

Ready

Type here to search

1:48 PM 9/23/2017

Use Cell Styles

The screenshot displays the Microsoft Excel interface with the following elements:

- Title Bar:** Knoll Revenue - Excel
- File Tab:** Home, Insert, Draw, Page Layout, Formulas, Data, Review, View
- Home Ribbon:** Font (Calibri, 11), Paragraph (B, I, U, Merge & Center), Alignment (Left, Center, Right), Number (Number, \$, %, .0, .00, .00, .00)
- Task Pane:** Cell Styles - Good, Bad and Neutral. It lists various styles such as Normal, Bad, Good, Neutral, Calculation, Check Cell, Explanatory, Input, Linked Cell, Note, Output, Warning Text, and Themed Cell Styles (20% - Accent1 to 60% - Accent6).
- Spreadsheet Data:**

	F	G	H	
2				
3				
4	<u>2014</u>	<u>2015</u>	<u>2016</u>	
5	3055755.53	3095490.00	3151406.00	
6	660000.00	660000.00	660000.00	
7	21467.39	34603.43	24657.85	
8	16500.00	6000.00	9000.00	
9	15770.00	7172.00	0.00	
10	10852.49	8159.00	18183.00	17562.38
11	<u>963.75</u>	<u>1442.00</u>	<u>1282.60</u>	<u>864.45</u>
12	<u>3781309.16</u>	<u>3812866.43</u>	<u>3864529.45</u>	<u>3319921.43</u>
13				
14				
15				
16				
- Status Bar:** Average: 1010895.23, Count: 64, Sum: 64697294.80

Clipboard: Paste, Copy, Cut

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Wrap Text, Merge & Center, Left, Right, Center, Justify

Number: General, Currency (\$), Percentage (%), Comma, Thousand Separator, Decimals (0, .00, .000)

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

B15 fx

A B C D E F

Golf Utility Sales by Year

1
2

	2010	2011	2012	2013	2014
--	------	------	------	------	------

3						
4						
5	Golf Fees	3,479,250	3,122,466	3,387,093	3,231,741	3,055,75

6	Concession Rent	1,316,354	1,341,554	779,154	660,000	660,00
---	-----------------	-----------	-----------	---------	---------	--------

7	Concession Utilities	26,173	18,734	15,429	16,204	21,46
---	----------------------	--------	--------	--------	--------	-------

8	Concession Garbage	18,000	15,000	18,000	18,000	16,50
---	--------------------	--------	--------	--------	--------	-------

9	Room Rental/Utilities	14,350	15,033	15,011	15,636	15,77
---	-----------------------	--------	--------	--------	--------	-------

10	Interest on Investments	21,401	8,492	4,685	6,720	10,85
----	-------------------------	--------	-------	-------	-------	-------

11	Misc	2,242	1,721	674	907	96
----	------	-------	-------	-----	-----	----

12	TOTAL REVENUE	4,877,768	4,522,999	4,220,046	3,949,207	3,781,30
----	----------------------	------------------	------------------	------------------	------------------	-----------------

13

14

15

Use Format as Table

The screenshot shows the Microsoft Excel interface with a table of revenue data. The 'Format as Table' pane is open, displaying various table styles categorized into 'Light', 'Medium', and 'Dark'. The table data is as follows:

	A	B	C	
2				
3				
4		<u>2010</u>	<u>2011</u>	
5	Golf Fees	3479249.60	3122466.00	33
6	Concession Rent	1316353.81	1341554.00	7
7	Concession Utilities	26172.94	18733.54	
8	Concession Garbage	18000.00	15000.00	
9	Room Rental/Utilities	14349.50	15032.75	
10	Interest on Investments	21400.73	8491.68	
11	Misc	<u>2241.50</u>	<u>1721.38</u>	
12	TOTAL REVENUE	<u>4877768.08</u>	<u>4522999.35</u>	<u>42</u>
13				
14				
15				
16				

The 'Format as Table' pane shows a grid of table styles. The 'Light' section includes styles with light backgrounds and dark text. The 'Medium' section includes styles with medium backgrounds and dark text. The 'Dark' section includes styles with dark backgrounds and light text. At the bottom of the pane, there are options for 'New Table Style...' and 'New PivotTable Style...'. The status bar at the bottom of the Excel window shows 'Average: 1010895.23', 'Count: 64', and 'Sum: 64697294.80'. The taskbar at the bottom of the screen shows the time as 1:39 PM on 9/23/2017.

Clipboard: Paste, Copy, Cut

Font: Calibri, 11, Bold, Italic, Underline, Color, Background Color

Alignment: Wrap Text, Merge & Center, Left, Center, Right, Indent

Number: General, Currency, Percentage, Comma, Thousand Separator, Negative numbers in parentheses, Zero as zero, Fraction

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

A2 Sales by Year

	A	B	C	D	E
2	Sales by Year				
3					
4		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
5	Golf Fees	\$3,479,250	\$3,122,466	\$3,387,093	\$3,231,741
6	Concession Rent	1,316,354	1,341,554	779,154	660,000
7	Concession Utilities	26,173	18,734	15,429	16,204
8	Concession Garbage	18,000	15,000	18,000	18,000
9	Room Rental/Utilities	14,350	15,033	15,011	15,636
10	Interest on Investments	21,401	8,492	4,685	6,720
11	Misc	<u>2,242</u>	<u>1,721</u>	<u>674</u>	<u>907</u>
12	TOTAL REVENUE	<u><u>\$4,877,768</u></u>	<u><u>\$4,522,999</u></u>	<u><u>\$4,220,046</u></u>	<u><u>\$3,949,207</u></u>
13					

Trend Analysis ~ Conditional Formatting

Knoll Revenue - Excel

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number

Conditional Formatting Format as Table Cell Styles

Highlight Cells Rules
 Top/Bottom Rules
 Data Bars
 Color Scales
 Icon Sets
 New Rule...
 Clear Rules
 Manage Rules...

Directional
 Shapes
 Indicators
 Ratings
 More Rules...

	A	B	C	D	E	F	G
1							
2							
3							
4		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>		<u>2015</u>
5	Golf Fees	\$ 3,479,250	\$ 3,122,466	\$ 3,387,093	\$ 3,230,000		\$ 3,095,400
6	Concession Rent	1,316,354	1,341,554	779,154	660,000		660,000
7	Concession Utilities	26,173	18,734	15,429	10,000		34,000
8	Concession Garbage	18,000	15,000	18,000	10,000		6,000
9	Room Rental/Utilities	14,350	15,033	15,011	10,000		7,000
10	Interest on Investments	21,401	8,492	4,685			8,000
11	Misc	2,242	1,721	674			1,400
12	TOTAL REVENUE	\$ 4,877,768	\$ 4,522,999	\$ 4,220,046	\$ 3,940,000		\$ 3,812,800
13							
14							

Ready

Average: \$1,010,895 Count: 64 Sum: \$64,697,295

1:57 PM 9/23/2017

File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 Bold Italic Underline Merge & Center Wrap Text

Conditional Formatting Format as Table Cell Styles

AutoSum Fill Clear Sort & Filter Find & Select

C5 3122466

	A	C	D	E	F
1		Golf Utility			
2		Sales by Year			
3					
4		<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
5	Golf Fees	➔ \$ 3,122,466	⬆️ \$ 3,387,093	➔ \$ 3,231,741	➔ \$ 3,055,756
6	Concession Rent	1,341,554	779,154	660,000	660,000
7	Concession Utilities	18,734	15,429	16,204	21,467
8	Concession Garbage	15,000	18,000	18,000	16,500
9	Room Rental/Utilities	15,033	15,011	15,636	15,770
10	Interest on Investments	8,492	4,685	6,720	10,852
11	Misc	1,721	674	907	964
12	TOTAL REVENUE	<u><u>\$ 4,522,999</u></u>	<u><u>\$ 4,220,046</u></u>	<u><u>\$ 3,949,207</u></u>	<u><u>\$ 3,781,309</u></u>

Clipboard: Paste, Copy, Cut

Font: Calibri, 11, Bold, Italic, Underline, Text Color, Background Color

Alignment: Left, Center, Right, Merge & Center, Wrap Text

Number: General, Currency, Percentage, Comma, Thousand Separator, Negative numbers in parentheses, Zero as zero, Fraction

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: AutoSum, Fill, Clear, Sort & Filter, Find & Select

A2 fx Sales by Year

	A	C	D	E	F
2		Sales by Year			
3					
4		<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
5	Golf Fees	➔ \$ 3,122,466	⬆️ \$ 3,387,093	➔ \$ 3,231,741	➔ \$ 3,055,756
6	Concession Rent	⬆️ 1,341,554	➔ 779,154	⬇️ 660,000	⬇️ 660,000
7	Concession Utilities	⬇️ 18,734	⬇️ 15,429	⬇️ 16,204	⬇️ 21,467
8	Concession Garbage	⬆️ 15,000	⬆️ 18,000	⬆️ 18,000	⬆️ 16,500
9	Room Rental/Utilities	⬆️ 15,033	⬆️ 15,011	⬆️ 15,636	⬆️ 15,770
10	Interest on Investments	⬇️ 8,492	⬇️ 4,685	⬇️ 6,720	➔ 10,852
11	Misc	➔ <u>1,721</u>	⬇️ <u>674</u>	⬇️ <u>907</u>	⬇️ <u>964</u>
12	TOTAL REVENUE	⬆️ <u><u>\$ 4,522,999</u></u>	➔ <u><u>\$ 4,220,046</u></u>	➔ <u><u>\$ 3,949,207</u></u>	⬇️ <u><u>\$ 3,781,309</u></u>
13					

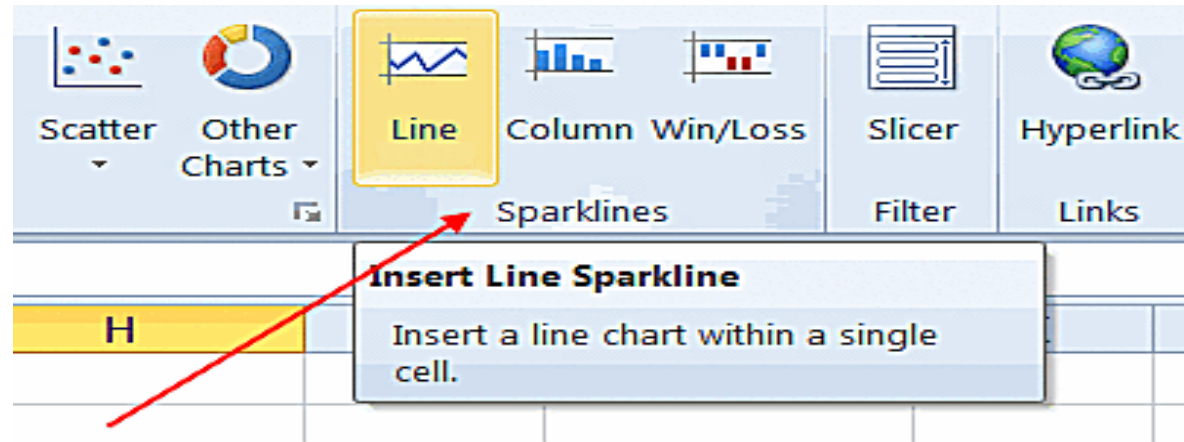
Clipboard Font Alignment Number Styles Cells Editing

Calibri 11 A A Wrap Text Merge & Center General \$ % .0 .00 Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Clear Sort & Filter Find & Select

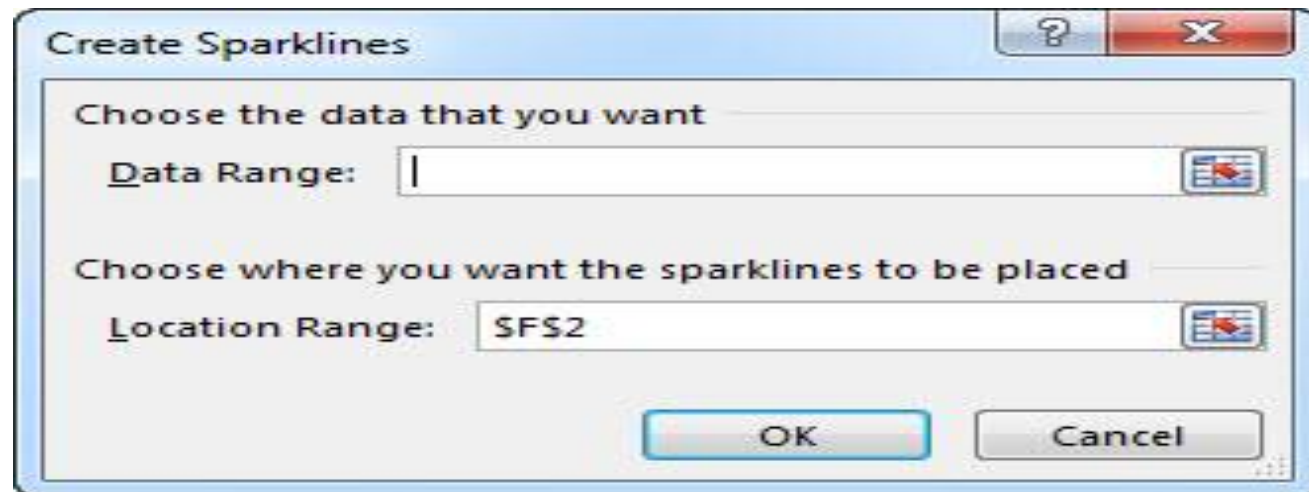
2 fx Sales by Year

	A	C	D	E	F
2	Sales by Year				
3					
4		<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
5	Golf Fees	▶ \$ 3,122,466	▶ \$ 3,387,093	▶ \$ 3,231,741	▶ \$ 3,055,756
6	Concession Rent	● 1,341,554	● 779,154	● 660,000	● 660,000
7	Concession Utilities	● 18,734	● 15,429	● 16,204	● 21,467
8	Concession Garbage	✓ 15,000	✓ 18,000	✓ 18,000	✓ 16,500
9	Room Rental/Utilities	★ 15,033	★ 15,011	★ 15,636	★ 15,770
10	Interest on Investments	✗ 8,492	✗ 4,685	✗ 6,720	! 10,852
11	Misc	↗ 1,721	↓ 674	↓ 907	↓ 964
12	TOTAL REVENUE	↑ \$ 4,522,999	→ \$ 4,220,046	→ \$ 3,949,207	↓ \$ 3,781,309
13					

Analyzing Trends Using Sparklines



Choose the type of Sparkline from the options available on the Insert tab of the ribbon



PivotTable Recommended PivotTables Tables
 Pictures Online Pictures Illustrations
 Recommended Charts Charts
 Maps PivotChart 3D Map Tours
 Sparklines Line Column Win/Loss
 Slicer Timeline Filters Links
 Text
 Equation Symbol Symbols

C5 fx

Create Sparklines

Choose the data that you want

Data Range: C5:J5

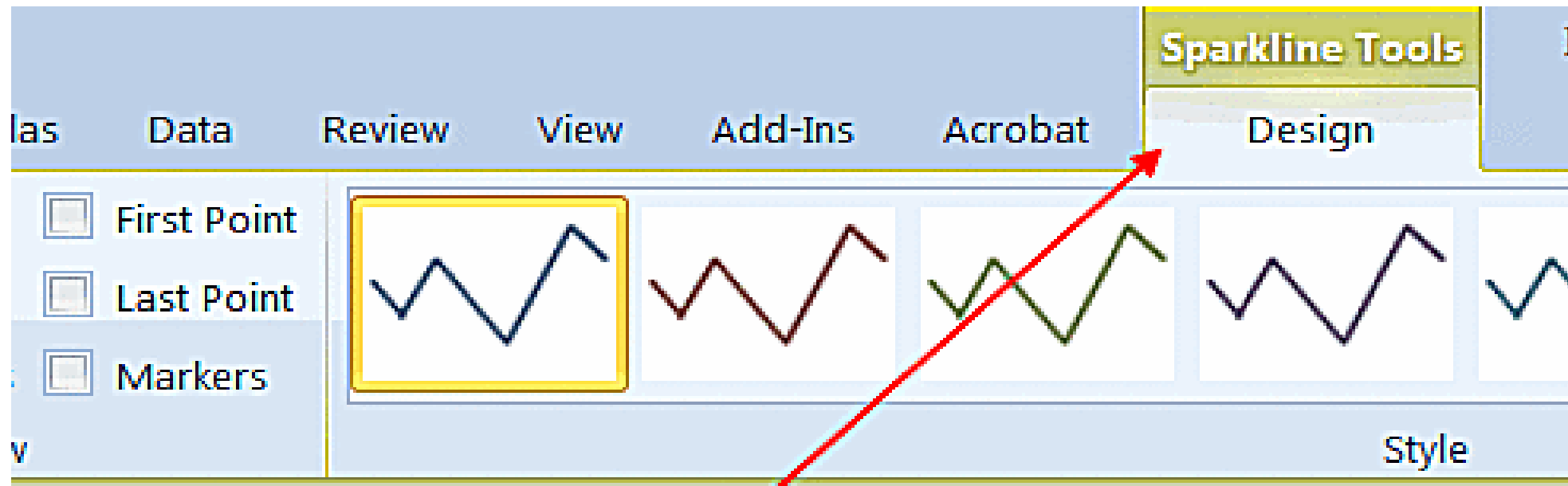
Choose where you want the sparklines to be placed

Location Range: \$B\$5

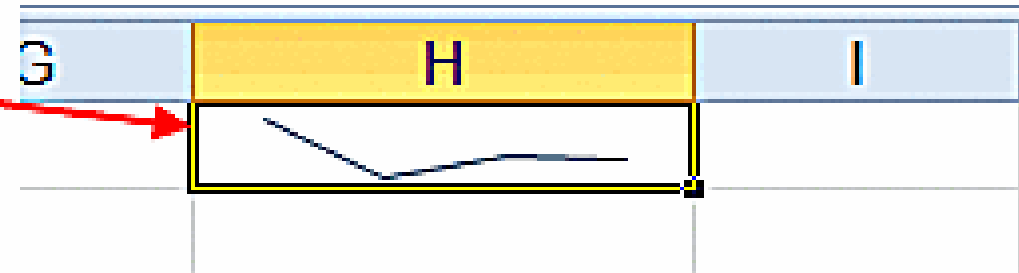
OK Cancel

	A	B		E	F	G		
				Golf Utility Expenses by Year				
4		TREND		2010	2011	2012	2013	2014
5	Golf Fees			3,479,250	3,122,466	3,387,093	3,231,741	3,055,756
6	Concession Rent			1,316,354	1,341,554	779,154	660,000	660,000
7	Concession Utilities			26,173	18,734	15,429	16,204	21,467
8	Concession Garbage			18,000	15,000	18,000	18,000	16,500
9	Room Rental/Utilities			14,350	15,033	15,011	15,636	15,770
10	Interest on Investments			21,401	8,492	4,685	6,720	10,852
11	Misc			2,242	1,721	674	907	964
12	TOTAL REVENUE			4,877,768	4,522,999	4,220,046	3,949,207	3,781,309
13								
14								
15								
16								
17								
18								

Create Sparkline Menu



Click on a sparkline to activate the Sparkline Tools Design tab on the ribbon



Line Column Win/Loss Type

High Point First Point Low Point Last Point Negative Points Markers Show

Sparkline Color Marker Color

Axis Group Ungroup Clear Group

fx

A B C D E F G

Golf Utility Sales by Year

	<u>TREND</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Golf Fees		3,479,250	3,122,466	3,387,093	3,231,741	3,055,756
Concession Rent		1,316,354	1,341,554	779,154	660,000	660,000
Concession Utilities		26,173	18,734	15,429	16,204	21,467
Concession Garbage		18,000	15,000	18,000	18,000	16,500
Room Rental/Utilities		14,350	15,033	15,011	15,636	15,770
Interest on Investments		21,401	8,492	4,685	6,720	10,852
Misc		<u>2,242</u>	<u>1,721</u>	<u>674</u>	<u>907</u>	<u>964</u>
TOTAL REVENUE		<u>4,877,768</u>	<u>4,522,999</u>	<u>4,220,046</u>	<u>3,949,207</u>	<u>3,781,309</u>

File Home Insert Draw Page Layout Formulas Data Review View Design

Line Column Win/Loss

High Point First Point Low Point Last Point Negative Points Markers

Sparkline Color Marker Color

Group Ungroup Clear

B5 fx

	A	B	C	D
1				
2				
3				
4		<u>TREND</u>	<u>2010</u>	<u>2011</u>
5	Golf Fees		▶ 3,479,250	▶ 3,122,466
6	Concession Rent		▶ 1,316,354	▶ 1,341,554
7	Concession Utilities		▶ 26,173	▶ 18,734
8	Concession Garbage		▶ 18,000	▶ 15,000
9	Room Rental/Utilities		▶ 14,350	▶ 15,033
10	Interest on Investments		▶ 21,401	▶ 8,492
11	Misc		▶ <u>2,242</u>	▶ <u>1,721</u>

Calibri 15 A A Wrap Text Merge & Center General \$ % .00 .00 Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Clear Sort & Filter Find & Select

Golf Utility

A B C D E F G H I J

Golf Utility Sales by Year

	TREND	2010	2011	2012	2013	2014	2015	2016	2017*
Golf Fees		3,479,250	3,122,466	3,387,093	3,231,741	3,055,756	3,095,490	3,151,406	2,832,927
Concession Rent		1,316,354	1,341,554	779,154	660,000	660,000	660,000	660,000	410,000
Concession Utilities		26,173	18,734	15,429	16,204	21,467	34,603	24,658	48,567
Concession Garbage		18,000	15,000	18,000	18,000	16,500	6,000	9,000	10,000
Room Rental/Utilities		14,350	15,033	15,011	15,636	15,770	7,172	-	-
Interest on Investments		21,401	8,492	4,685	6,720	10,852	8,159	18,183	17,562
Misc		2,242	1,721	674	907	964	1,442	1,283	864
TOTAL REVENUE		4,877,768	4,522,999	4,220,046	3,949,207	3,781,309	3,812,866	3,864,529	3,319,921

Protect your work!

Info

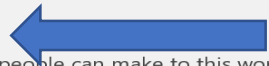
Knoll Revenue






D: » Par Troy » GFOA



Protect Workbook

Control what types of changes people can make to this workbook.



-  **Mark as Final**
Let readers know the workbook is final and make it read-only.
-  **Encrypt with Password**
Require a password to open this workbook.
-  **Protect Current Sheet**
Control what types of changes people can make to the current sheet.
-  **Protect Workbook Structure**
Prevent unwanted changes to the structure of the workbook, such as adding sheets.
-  **Add a Digital Signature**
Ensure the integrity of the workbook by adding an invisible digital signature.



Pick what users can see when this workbook is viewed on the Web.



Properties

Size	36.8KB
Title	Add a title
Tags	Add a tag
Categories	Add a category

Related Dates

Last Modified	Today, 2:34 PM
Created	Yesterday, 4:02 PM
Last Printed	

Related People

Author	 Ann Cucci
	Add an author
Last Modified By	 Ann Cucci

Related Documents

 [Open File Location](#)

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- New
- Open
- Save
- Save As
- Print
- Share
- Export
- Close
- Account
- Feedback
- Options
- Store

Mark as Final




Excel2016_Inspect_Protect_Practice [Read-Only] - Excel

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i MARKED AS FINAL An author has marked this workbook as final to discourage editing.

D17 Redwoods hike

	A	B	C	D	E	F
1						
2						
3						
4						
5						



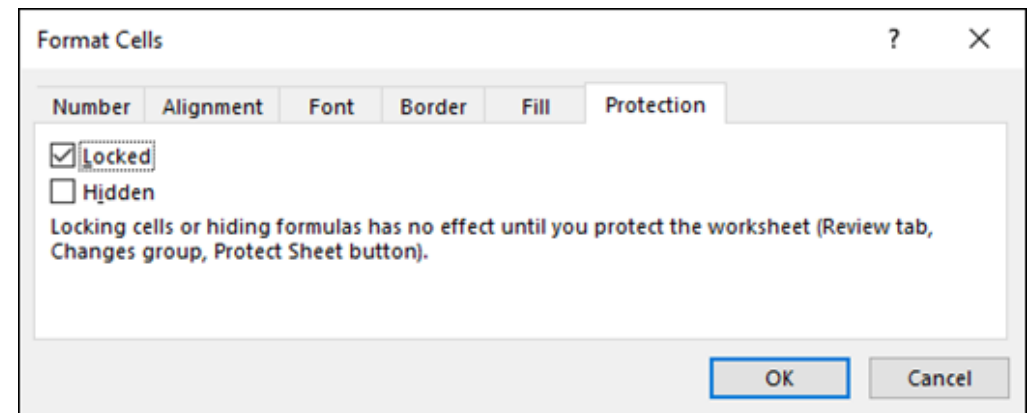
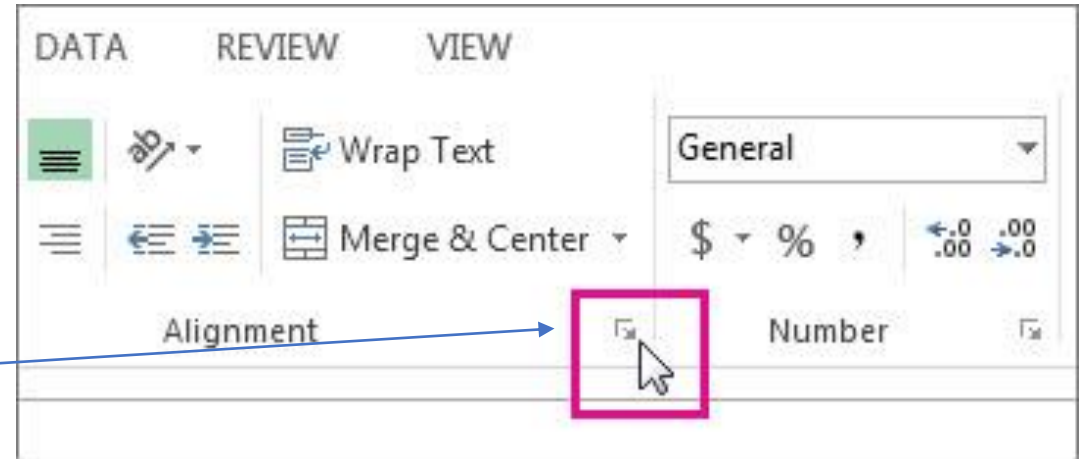
Event:	Team-Building Retreat
Location:	Waverly Point Nature Preserve
Date:	August

AGENDA PLANNER

Enable Worksheet Protection

Step 1

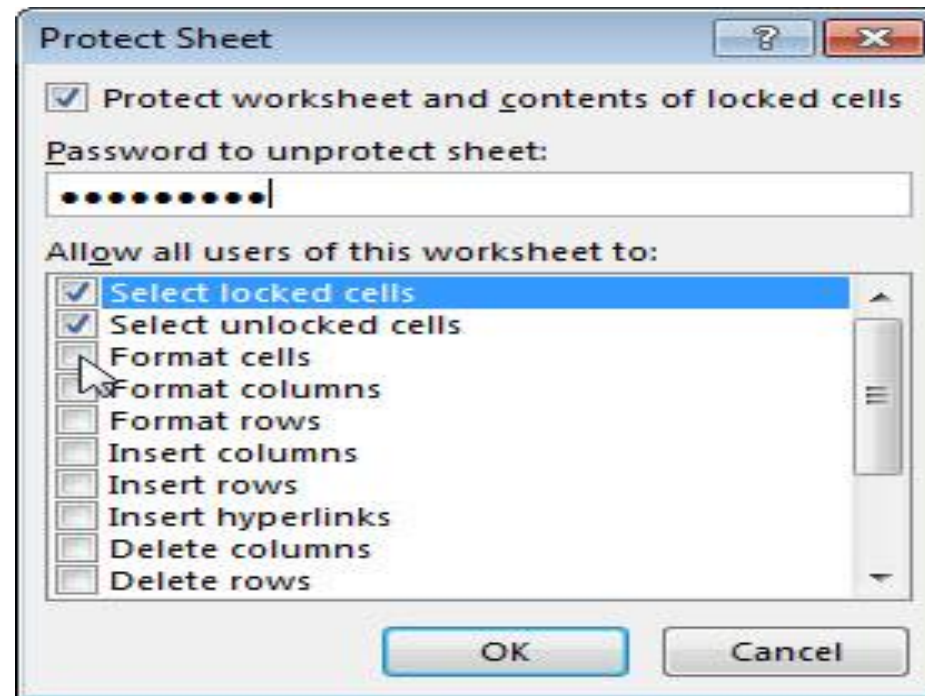
- Unlock any cells that need to be editable
- Simply uncheck “Locked”



Enable Worksheet Protection

Step 2

- In Review tab, click Protect Sheet.
- Allow users to do specific functions.
- Put a Password to unprotect sheet.(Optional)



File Home Insert Draw Page Layout Formulas Data Review View Tell me what you want to do

Function Library: Insert Function, AutoSum, Recently Used, Financial, Logical, Text, Date & Time, Lookup & Reference, Math & Trig, More Functions, Name Manager, Define Name, Use in Formula, Create from Selection, Trace Precedents, Trace Dependents, Remove Arrows, Show Formulas, Error Checking, Evaluate Formula, Watch Window, Calculate Now, Calculate Sheet, Calculation Options

	A	B	C	D	E	F	G	H
1	Assumptions:	2018	2019	2020				
2	Increase in Amount to be Raised	2.00%	1.50%	1.00%	max			
3	Percentage on OE	1.00%	1.00%	1.00%				
4	Percentage on SW	2.00%	2.00%	2.00%				
5	Library Tax	0.04%	0.04%	0.04%				
6	PFRS	5.41%	5.41%	5.41%				
7	PERS	2.78%	2.78%	2.78%				
8	Assessed Value Increase/(Decr)	\$20,000,000	\$27,000,000	\$0				

**Township of Parsippany-Troy Hills
Current Fund**

	Actual			Anticipated	Projected		
	2014	2015	2016	2017	2018	2019	2020
Revenues							
Operating Surplus Anticipated	3,580,000	3,717,448	3,700,000	3,700,000	3,700,000	3,700,000	3,700,000
Misc Revenue:							
Licenses:							
Alcoholic Beverages	89,810	89,394	88,620	88,000	88,000	88,000	88,000
Other	211,575	223,489	218,224	220,000	220,000	220,000	220,000
Fees & Permits	1,152,287	1,052,660	1,098,667	1,000,000	1,000,000	1,000,000	1,000,000
Court	542,515	570,148	548,097	540,000	540,000	540,000	540,000
Interest on Taxes	349,816	388,737	348,674	340,000	340,000	340,000	340,000
Interest on Investments	62,035	68,600	136,371	125,000	130,000	135,000	140,000
Garbage	1,618,588	1,564,006	1,474,190	1,470,000	1,500,000	1,500,000	1,500,000
Lease of Municipal Assets				500,000	500,000	500,000	500,000

Questions?

