

Microsoft Excel Level 2

Learn about common functions, charts, and IF statements.

Common Functions

Name	Sample Formula	What It Does	Example
AutoSum	=SUM(A1:A5)	Adds all the numbers in a range of cells.	Determine the total value of the inventory I have in my store.
Minimum	=MIN(A1:A5)	Finds the smallest number in a range of cells.	Determine the lowest salary of any of the employees in my division.
Maximum	=MAX(A1:A5)	Finds the largest number in a range of cells.	Determine the highest salary of any of the employees in my division.
If	=IF(A>50, "TRUE", "FALSE")	Returns different results based on the data.	List all students with passing grades greater than 50.
VLOOKUP	=VLOOKUP(A1,F1:G4,2)	Finds a specific value in specified columns of data.	

Creating a Formula

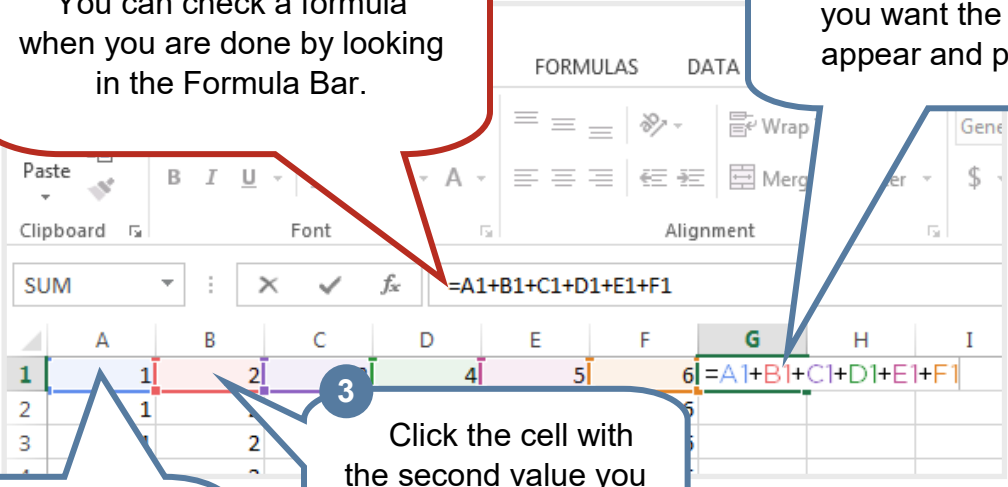
NOTE:
You can check a formula when you are done by looking in the Formula Bar.

1 Click the cell where you want the total to appear and press **=**.

2 Click the cell with the first value you want to add and type **+**.

3 Click the cell with the second value you want to add.

4 Include as many cells as needed, then click **Enter**.



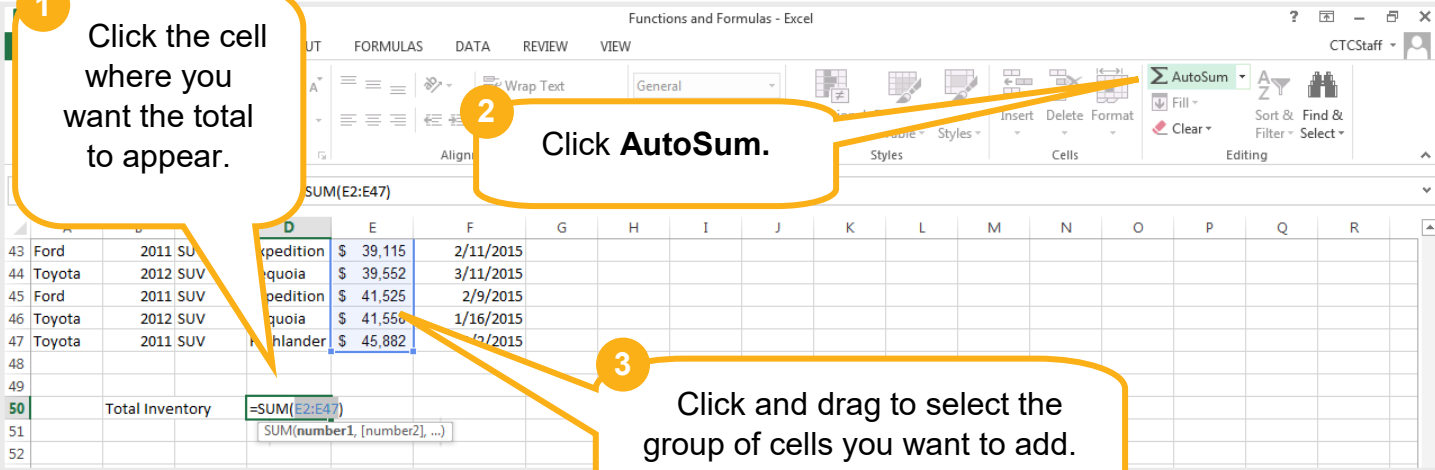
Functions

Functions are pre-programmed formulas frequently used in calculations. **AutoSum** is a function used to add values in a range of cells.

1 Click the cell where you want the total to appear.

2 Click **AutoSum**.

3 Click and drag to select the group of cells you want to add. Click **Enter**.



43	Ford	2011 SUV	Expedition	\$ 39,115	2/11/2015
44	Toyota	2012 SUV	4Runner	\$ 39,552	3/11/2015
45	Ford	2011 SUV	Expedition	\$ 41,525	2/9/2015
46	Toyota	2012 SUV	4Runner	\$ 41,550	1/16/2015
47	Toyota	2011 SUV	4Runner	\$ 45,882	2/9/2015
48					
49					
50		Total Inventory		=SUM(E2:E47)	
51				SUM(number1, [number2], ...)	
52					

Math Functions

Name	Sample Formula	What It Does	Example
Average	=AVERAGE (A1:C5)	Finds the average of all the numbers in a range of cells.	Determine the average salary of employees my company.

Logical Functions

Name	Sample Formula	What It Does	Example
Count	=COUNT(B:B)	Checks every cell to see if there is a number in it, then returns the number of cells that do.	Determine the number of events I organized for my company where at least one person showed up.
SumIf	=SUMIF(A1:A35, ">65", B1:B35)	Adds numbers from a list that meets a criteria set by a formula.	I want to know the total number of students in my class over the age of 65.
CountIf	=COUNTIF(A:A, 16)	Counts every cell that meets a criteria you set in the formula.	I want to know the number of times I have all the seats filled in my classroom.

Graphs

A graph is a visual representation of your data.

1 Start on the **Insert** tab.

2 Click anywhere in your data.

3 Click the type of graph that best suits your data.

4 Select the preferred graph type.

	Denver store	Aurora store	Lakewood store
January	\$ 25,000	\$ 37,000	\$ 55,000
February	\$ 29,000	\$ 60,000	\$ 68,000
March	\$ 37,000	\$ 67,000	\$ 42,000
April	\$ 42,000	\$ 52,000	\$ 35,000
May	\$ 54,000	\$ 19,000	\$ 41,000
June	\$ 60,000	\$ 33,000	\$ 65,000
July	\$ 67,000	\$ 29,400	\$ 42,000
August	\$ 52,000	\$ 25,000	\$ 37,000
September	\$ 19,000	\$ 20,600	\$ 42,000
October	\$ 22,000	\$ 46,000	\$ 54,000
November	\$ 35,000	\$ 52,000	\$ 60,000
December	\$ 48,000	\$ 81,000	\$ 67,000

NOTE:
As long as your graph is selected, you have Chart Tools tabs available.

Graph features that can be changed include adding a chart title, moving the legend, or adding a title to the axes.

	Denver store	Aurora store	Lakewood store
January	\$ 25,000	\$ 37,000	\$ 55,000
February	\$ 29,000	\$ 60,000	\$ 68,000
March	\$ 37,000	\$ 67,000	\$ 42,000
April	\$ 42,000	\$ 52,000	\$ 35,000
May	\$ 54,000	\$ 19,000	\$ 41,000
June	\$ 60,000	\$ 33,000	\$ 65,000
July	\$ 67,000	\$ 29,400	\$ 42,000
August	\$ 52,000	\$ 25,000	\$ 37,000
September	\$ 19,000	\$ 20,600	\$ 42,000
October	\$ 22,000	\$ 46,000	\$ 54,000
November	\$ 35,000	\$ 52,000	\$ 60,000
December	\$ 48,000	\$ 81,000	\$ 67,000

IF Statement

An IF statement allows you to fill your cell with values when certain conditions are met.

1 Click the cell where you want the value to appear.

2 Click the options arrow next to AutoSum.

3 Click **More Functions...**

4 Select **IF** from the list of <https://wpl.winnipeg.ca/library/pdfs/posters/janfeb/Aboutwilis.pdf>

5 Click **OK**.

NOTE:
The most commonly used functions will be listed.

Insert Function dialog box:

Search for a function:
Type a brief description of what you want to do, and then click Go

Or select a category: Most Recently Used

Select a function:
COUNT
IF
COUNTIFS
PMT
TEXT
SUM
AVERAGE

IF(logical_test,value_if_true,value_if_false)
Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE.

[Help on this function](#)

OK Cancel

6 Fill in all the fields.

7 Click **OK**.

The logical test allows you to ask a question that can be answered True or False.

Formula bar: `=IF(G5>45,"Advertise","")`

Function Arguments dialog box:

IF

Logical_test: G5>45 = TRUE

Value_if_true: "Advertise" = "Advertise"

Value_if_false: "" = ""

Checks whether a condition is TRUE. If TRUE, returns the value in the Value_if_true argument. If FALSE, returns the value in the Value_if_false argument. If Value_if_false is omitted, FALSE is returned.

Formula result = Advertise

[Help on this function](#)

OK Cancel

Printing

Make sure Excel will print your spreadsheet in the most effective layout.

Excel Basics Personal Budget - Excel

Kristen Mueller

Print

Copies: 1

Printer

CTC HP4350 workroom on...
Ready

Settings

Print Active Sheets
Only print the active sheets

Pages: 1 to 3

Print One Sided
Only print on one side of th...

Collated
1,2,3 1,2,3 1,2,3

Landscape Orientation

Letter
8.5" x 11"

Narrow Margins
Left: 0.25" Right: 0.25"

Fit Sheet on One Page
Shrink the printout so that it...

Page Setup

Personal Budget

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Income												
Wages	\$2,200.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
Interest	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Misc.	\$200.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$200.00	\$0.00	\$0.00	\$0.00	\$0.00
Income Totals	\$2,400.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,200.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00
Expenses												
Home												
Mortgage/Rent	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00	\$800.00
Utilities	\$125.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Phone	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00
Home Improvement/Repairs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Home Totals	\$1,000.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00
Living												
Groceries	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Child Care	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Eating Out	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Living Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Transportation												
Gas	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Insurance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Parking	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Public Transportation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Transportation Totals	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Expenses Totals	\$1,000.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00	\$875.00
Over/Short	\$1,400.00	\$1,125.00	\$1,125.00	\$1,125.00	\$1,125.00	\$1,125.00	\$1,125.00	\$1,325.00	\$1,125.00	\$1,125.00	\$1,125.00	\$1,125.00

1 of 1

WHERE TO GET MORE HELP:

Library staff can help you find books and additional resources on your topic.

LinkedIn Learning: Go to **Our Collections > Digital Library** and click **Databases** to find **LinkedIn Learning**. Use your library card to access videos to learn more about a topic.

Info Guides: Check out the library's Info Guide at guides.wpl.winnipeg.ca.

Google: Go to google.com and conduct a search. Click on Videos in the options at the top if you prefer video instruction.

Digitallearn.org: Continue learning about computers and software online.

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