

Introduction to Excel 2013 Part 2

Open a file

Select “File” from the Menu bar, select “Open” from the drop down menu, navigate to the place where the file was stored, double-left click on the file name.

Modify a worksheet - Start

	A	B	C	D	E	F
1	Personal Budget					
2		Jan	Feb	Mar	Apr	Total
3	Income					
4	Wages	100	110			
5	Expenses					
6	Cellular telephone	5	7			
7	Food	20	12			
8	Gas/Fuel	20	15			
9	Home telephone	10	15			
10	Mortgage/Rent	20	40			
11	Utilities	15	25			
12	Expense Total					
13						
14	Wages minus Expenses					

Steps: Select cell A1, Click the “Bold” icon in the Font group on the Home tab;

Select cells A1:F1, Click the “Merge and Center” icon from the alignment group on the Home tab;

Select Row 2, right click on the selected row, Click the “Insert” icon in the Cells group on the Home tab;

Select cells B3:F3; Click the “Center” icon from the alignment group on the Home tab;

Click the arrow to the right of the “Fill Color” icon in the Font group on the Home tab, select a color;

Click the arrow to the right of the “Font Color” icon in the Font group on the Home tab, select a color;

Click the arrow to the right of the “Border” icon in the Font group on the Home tab, select “Bottom Border”;

Select cell D5, Enter 100, copy to cell E5;

Select cell F5, click the Σ symbol in the Editing group on the Home tab, press “Enter” to accept the formula suggested;

Copy F5 to F6:F15

Select cells B5:F5, click the “Border” icon in the Font group on the Home tab;

Select cell F6 hold down the “Ctrl” key and click cell F14, Press the “Delete” key

Select cell B13, click the Σ symbol in the Editing group on the Home tab, press “Enter” to accept the formula suggested;

Copy B13 to C13:E13

Select cells B13:F13, Click the arrow to the right of the “Border” icon in the Font group on the Home tab, select “Top Border”;

Select cell B15, subtract B13 from B5; =B5-B13

Copy cell B15 to cells C15:E15

Select cells B15:F15, click the “Border” icon in the Font group on the Home tab.

Select B5:F15, Click the arrow at the right edge of the format selection box in the “Numbers” group on the Home tab, click “Currency”.

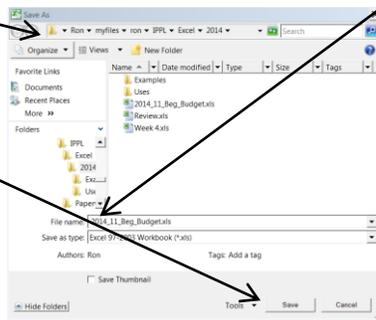
Modify a Worksheet - Finish

	A	B	C	D	E	F
1	Personal Budget					
2						
3		Jan	Feb	Mar	Apr	Total
4	Income					
5	Wages	100.00	100.00	100.00	100.00	400.00
6	Expenses					
7	Cellular telephone	5.00	7.00			12.00
8	Food	20.00	12.00			32.00
9	Gas/Fuel	20.00	15.00			35.00
10	Home telephone	10.00	15.00			25.00
11	Mortgage/Rent	20.00	40.00			60.00
12	Utilities	15.00	25.00			40.00
13	Expense Total	90.00	114.00	0.00	0.00	204.00
14						
15	Wages minus Expenses	10.00	-14.00	100.00	100.00	196.00

Menu tab “File”

Save – Used to save a previously named file (If the file has not been saved previously, the “Save As” dialog box will appear). Saves the previously named file in the location specified when the file was saved previously.

Save As – Used to save a new file or change the name/location of an existing file. In this dialog box chose the location at which the file will be saved and a file name for the saved file and click “Save”.



Close – Used to close the current document but leave Excel open.

Recent – Displays a list of recently used files. A single click on a file name in the list will open the file.

New – Opens the “Available Templates” dialog box. Double click “Blank Document” to open a new document.

Print – The print dialog box provides options for controlling the printing of the document. A page preview is provided at the far right and the available options are shown in the left pane. When ready to print, click the “Print” key.

Cell Addresses – Cell addresses, when used in formulas which are to be copied or cut to a new location, are by default adjusted to reflect their new position i.e. if the original formula added the two cells just above, the formula in its new location will add the two cells just above. This is called relative addressing. Certain situations require that a copied/cut cell address be fixed and not adjusted to reflect its new position. This is called absolute addressing and is indicated by using \$ signs as part of a cell address e.g. \$A\$1 – The cell address will remain the same, independent of

new location; \$A1 – Only the row number will change; A\$1 – Only the column letter will change; A1 – both the column letter and row number will change. The F4 function key can be used to cycle through the possible absolute addressing options.

Worksheet as a Table (Database)

A database is different from any other spreadsheet only in the arrangement of information. A database will not have any empty rows or columns. Each row, called a record, of a database will contain information pertinent to only one thing. In a phone book database the row will contain information for one person. In an inventory database the row will contain information related to only one item. Each column, called a field, will contain the same type of information related to the row i.e. first name, last name, for a phone book; part number, cost for an inventory. Additionally, each column in a database will have a name associated with it. These column headers are called field names.

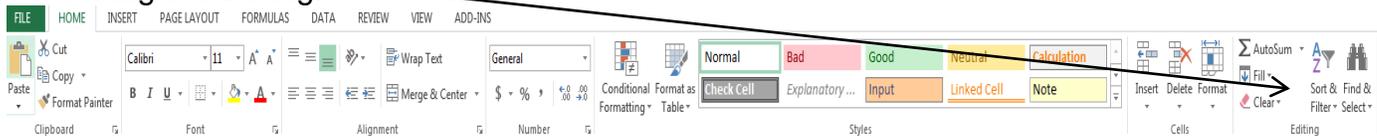
	A	B	C	D	E	F
← T	Last	First	Address	City	State	ZIP
2	Buffet	Jimmy	Somewhere on the Beach	Key West	FL	33040
3	Bush	George	1600 Pennsylvania Ave	Washington	DC	20500

Field Names

It is good practice to have a separate field for each data type i.e. first name, last name not a combination of first name and last name.

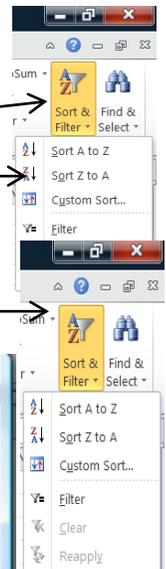
Sort

A common database task is to rearrange the information based on a field or fields. This is called **Sorting or Filtering**.

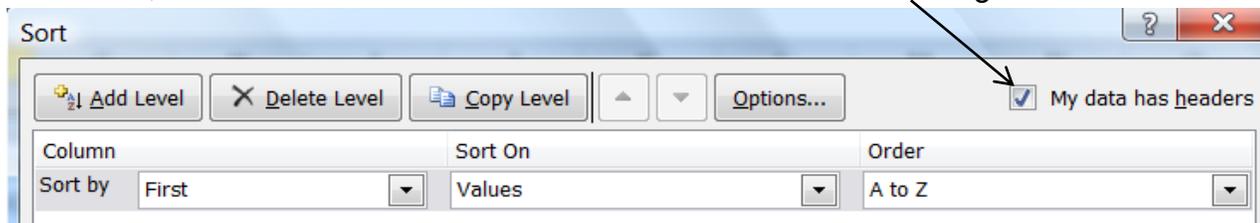


Sorting rearranges all of the information in the database based on the sort criteria. Filtering hides unwanted data. The remaining data may then be sorted.

To sort using a single column as the criterion: Place the “Active Cell” in the column to be used to control the sort; Select “Home” on the menu bar; Click on the “Sort & Filter” button at the far right end of the ribbon. Click on the desired sort direction. (Excel will determine the location of all of the data and complete the sort).

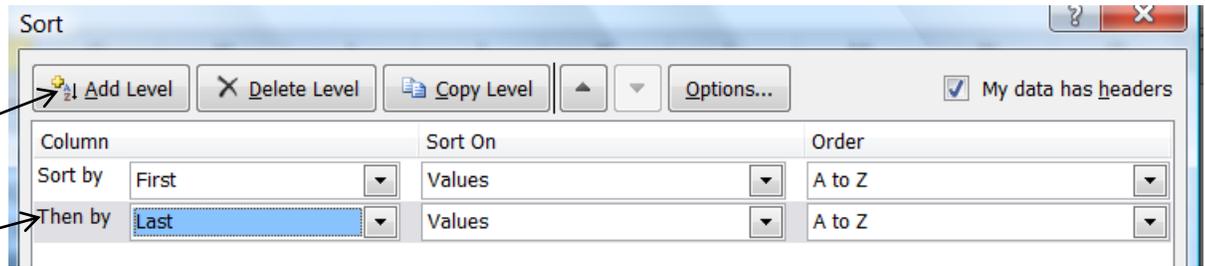


To sort on multiple columns: Place the “Active Cell” anywhere within the database; Select “Home” on the menu bar; Click on the “Sort & Filter” button at the far right end of the ribbon; Select “Custom Sort”. Note that the check box at the far right is checked. This



allows the use of field names in defining the sort. If this is not checked, selection will be by column letter. As shown, this sort is no different than a single column sort based on “First” (The “Sort by” field can be changed to a different field by clicking on the down arrow next to “First” and selecting a different field from the list).

To make it a multiple field sort, click the “Add Level” button. A second level, titled “Then by” has been



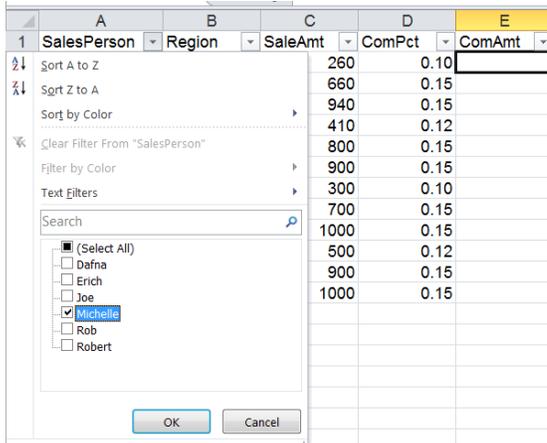
added to the sort criteria (I chose Last for this field; It comes up blank and the field is chosen from the drop down list). The up and down arrows can be used to change the order of the sort fields. Additional levels may be added as needed by clicking on the “Add level” button. Click on OK at the bottom of the dialog box to execute the sort.

Filter

Filters can be used to narrow down the data in your worksheet and hide parts of it from view. Click “Sort & Filter” on the Home ribbon. Select “Filter” from the drop down menu. Note that drop down arrows have been added next to each field name. Clicking on one of these arrows will display a dialog box from which sorting or filtering can take place. In addition, unique entries in that field will be displayed. Which entries are displayed will be determined by which boxes in the bottom portion of the dialog box are checked. Note that when a filter is in place, the arrow changes to a funnel.

	A	B	C	D	E
1	SalesPerson	Region	SaleAmt	ComPct	ComAmt
2	Joe	North	260	0.10	26.00

Removing the check from the “Select All” box and then checking the individual boxes will determine which entries are displayed.



	A
1	SalesPerson
4	Michelle

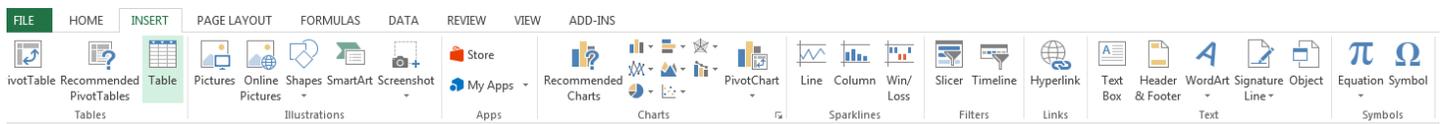
A filter can be placed on more than one field at a time.

To remove a filter on a field, click the funnel for that field and select “Clear filter from ...” in the upper portion of the dialog box.

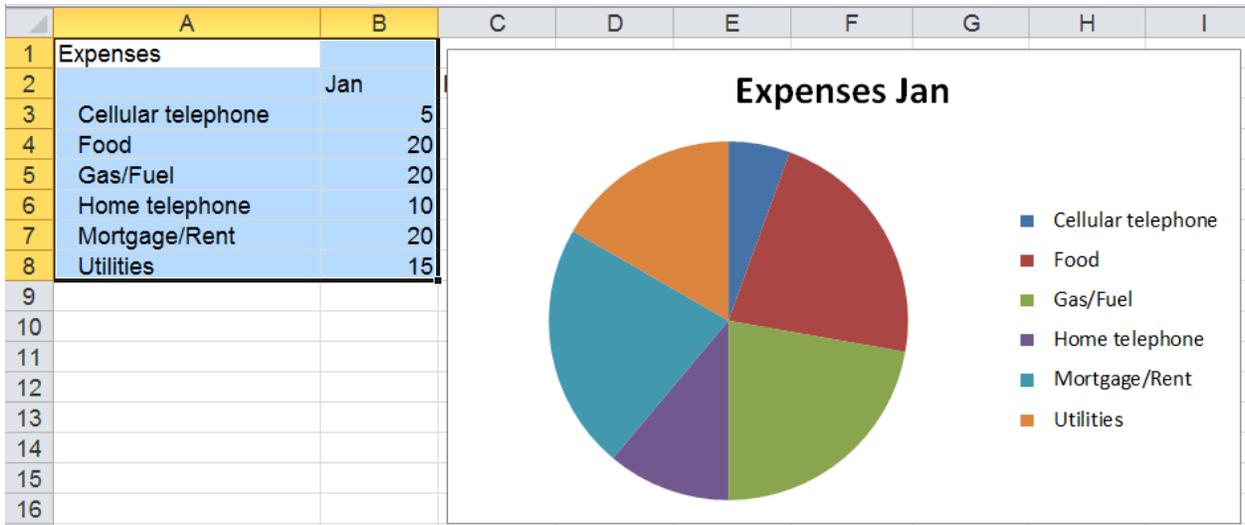
To turn off filtering, click “Sort & Filter” on the Home ribbon. Select “Filter” from the drop down menu.

Charts

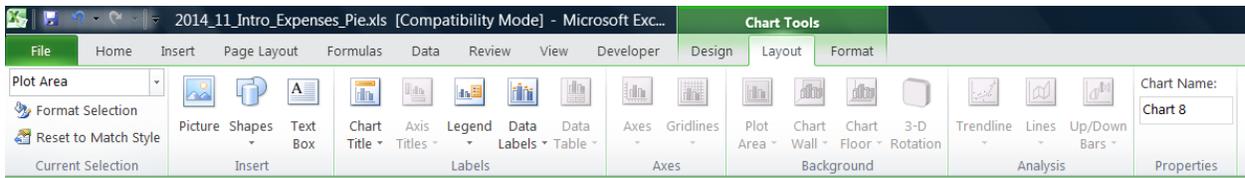
The first step in creating a chart is to select the data to be plotted. In the following example, the highlighted cells, one month’s expenses and associated titles, were selected. Click the “Insert” tab on the menu bar to display the “Insert” ribbon. Chart type is selected in the “Charts” group.



The next step is to decide what type of chart to use. A “Pie” chart is typically used to show how a total is divided into its constituent parts i.e. the sum of the parts make up the whole “Pie”.



When a chart is selected, a new tab is added to the menu bar. It is a contextual tab (only there when working with charts) labeled “Chart Tools” and has three associated tabs “Design”, “Layout”, and “Format”. All options related to a chart are available on one of these three tabs.



In this example, data for multiple months was selected. A “Column” chart is typically used when data sets are to be compared

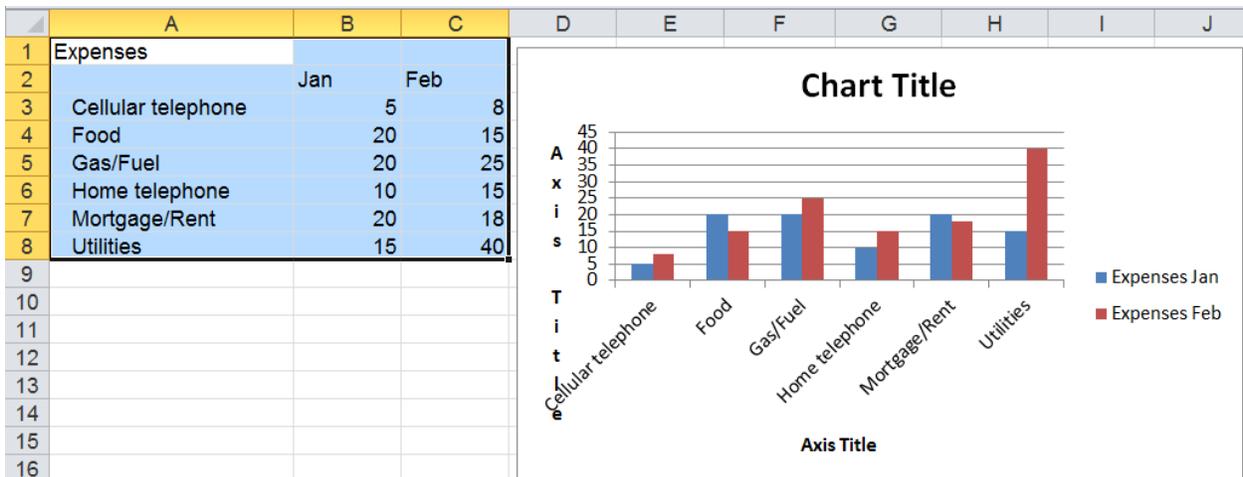
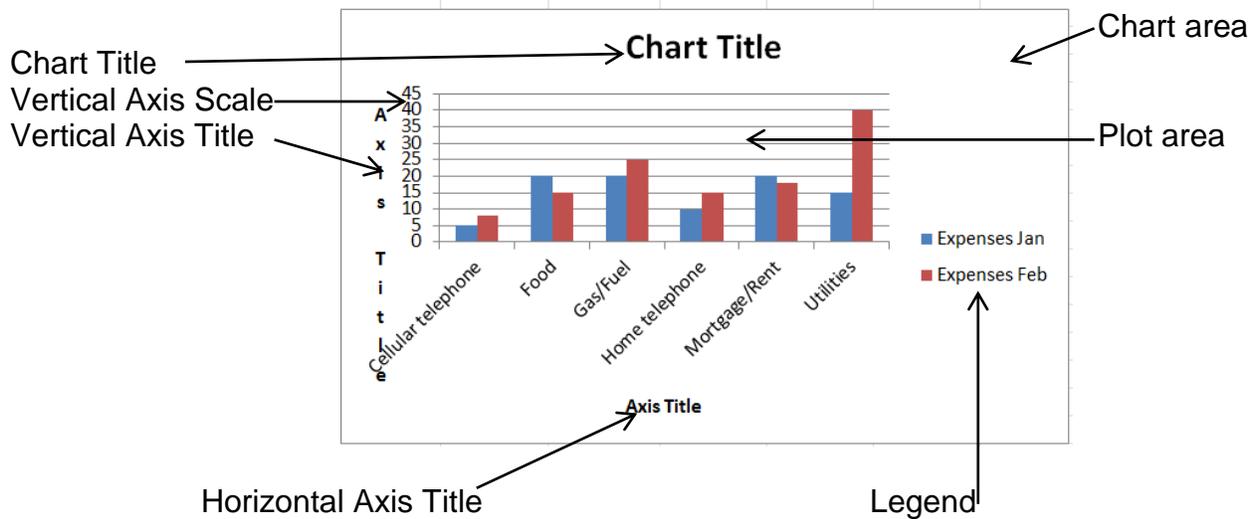


Chart vocabulary



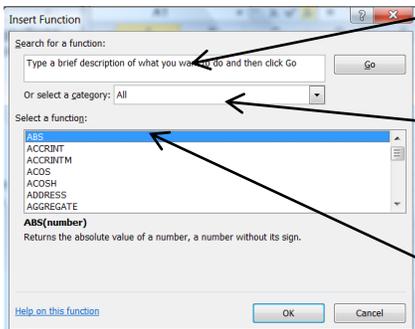
Functions

Functions are built-in tools Excel provides for doing many things. All functions have a name followed by a pair of parentheses. The parentheses may or may not contain arguments. Functions are found on the Formulas ribbon.

Clicking the “Insert Function” button produces the Insert Function dialog box.



The box has three sections;



Search for a function: Example – Enter “Car payment”, click Go, possible functions are displayed in the “Select a Function” box.

Select a category: Use the drop down arrow to show the categories, select a category, possible functions are displayed in the “Select a Function” box.

Select a Function: Based on choices in the previous sections, a list of functions is displayed. Clicking on a function in the list will display a brief description of what the function does and information on its

usage. Clicking OK after a function is selected will open the “Function Arguments” dialog box.

Help is available for the chosen function by clicking “Help on this function”.

Examples:

Now() – Returns the current date and time formatted as a date and time

Today() – Returns the current date

Left(text,Num_char) – Returns the specified number of characters from the start of a text string e.g. Left(“Now is the time”,6) returns Now is

PMT(rate,nper,pv,fv,type) –Calculates the repayment of a loan based on consistent payments and a constant interest rate e.g. $Pmt(.05/12,5*12,15000)=283.07$. A \$15,000 loan for 5 years at an annual interest rate of 5%.