

Excel on Steroids

sage

30 Microsoft® Excel® Tips and Tricks

Microsoft Excel 2007, 2010 & 2013

Functions & Formulas
PivotTables & PivotCharts
Data Formatting
Keyboard Shortcuts

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Need to display various currencies on your report? Use the CONCATENATION formula

Formatting cells allows you to change the way data is presented, without affecting the contents of the cell. Say for example you need to create a sales report to display the value of sales in various countries in each country's currency, you can apply the CONCATENATION formula, instead of having to manually change each cell to display the relevant currency for each country

Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2007, 2010 and 2013.

In this example, we'll apply the CONCATENATION formula to help change things. We'd like to add different currency symbols to our regional sales numbers, however, to avoid manually changing each cell in column B, we'll use the CONCATENATE function to link a specific cell to the sales values, allowing us to update one cell with a new symbol without changing the sales values.

1. Select **cell F1**.

	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	
2	East Coast	3,427,300				
3	North Coast	8,724,600				
4	South Coast	5,911,100				
5	West Coast	6,753,150				

2. Type in the dollar sign (\$) and press **Enter**.

	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	\$
2	East Coast	3,427,300				
3	North Coast	8,724,600				
4	South Coast	5,911,100				
5	West Coast	6,753,150				

3. Select **cell C2**, type in the following formula and press **Enter**:

=\$F\$1&" "&B2)

SUM X ✓ fx =\$F\$1&" "&B2						
	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	\$
2	East Coast	3,427	= \$F\$1&" "&B2			
3	North Coast	8,724,600				
4	South Coast	5,911,100				
5	West Coast	6,753,150				

NB: there is a space between the two inverted comma characters.

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4. Select **cell C2**. Use the Auto Fill handle to drag the formula to **C5**.

	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	\$
2	East Coast	3,427,300	\$ 3427300			
3	North Coast	8,724,600				
4	South Coast	5,911,100				
5	West Coast	6,753,150				

5. Select **cell F1**. Type in **R** and press **Enter**.

	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	\$
2	East Coast	3,427,300	\$ 3427300			
3	North Coast	8,724,600	\$ 8724600			
4	South Coast	5,911,100	\$ 5911100			
5	West Coast	6,753,150	\$ 6753150			

Note that the symbol in front of the numbers in column C has now updated.

While conditional formatting and custom format syntax rules are effective, there are times when these features can't help with the representation of data. Clever use of the CONCATENATE option can help you get around this.

	A	B	C	D	E	F
1	Region	Total Sales	New Value		Currency	R
2	East Coast	3,427,300	R 3427300			
3	North Coast	8,724,600	R 8724600			
4	South Coast	5,911,100	R 5911100			
5	West Coast	6,753,150	R 6753150			

How to find similar values in multiple lists using the Exact function in Excel

Microsoft® Excel® provides an easy way to find similar values between multiple lists using the Exact function in Excel. By applying this function you will be able to find out the exact match between two strings of data. When you are working in Excel, text differences within a cell can often be troublesome, that's why it is important to identify and remove varying information.

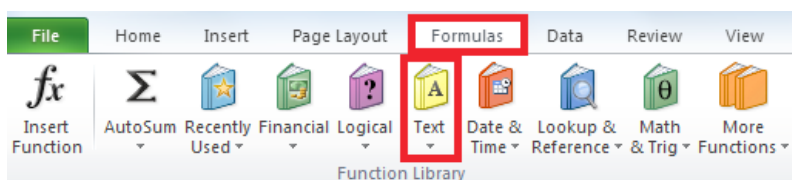
In our example, we explain how you can use the Exact function to compare two product lists. We'll work through the spreadsheet and compare client details as an accounts clerk to ensure that the information is the same.

Apply the Exact function to check whether two text strings are exactly the same. It will return the following results; TRUE if they match and FALSE if otherwise. It is important to note that the Exact function is also case sensitive.

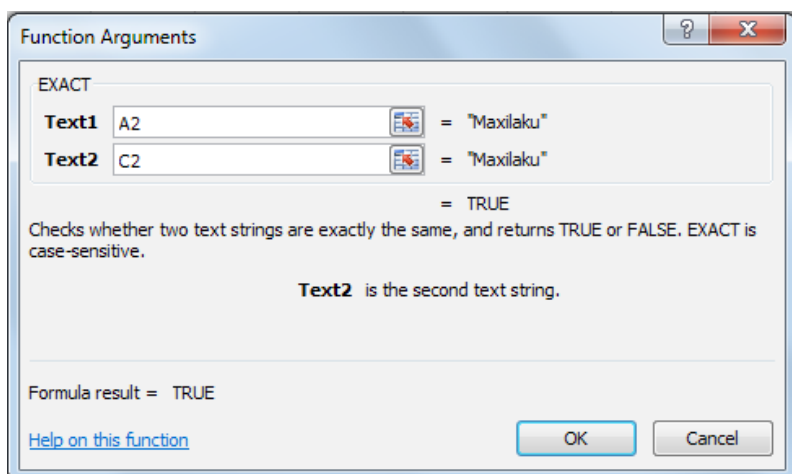
Download the [workbook](#) to practice

Applies to: Microsoft Excel 2010 and 2013

1. Select **cell E2**. Then select the Formulas tab, and select **Text**.



2. Select **Exact**.
3. Ensure the cursor is in the first text box (Text1) and select **cell A2**.
4. Then click in the second text box (Text2) and select **cell C2**.



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5. Select **OK**. Now you can copy the formula down to **cell E46**.

	A	B	C	D	E
1	Product Name		Product Name		Check
2	Maxilaku		Maxilaku		TRUE
3	Gnocchi di nonna Alice		Gnocchi di nonna Alice		TRUE
4	Tunnbröd		Tunnbröd		TRUE
5	Pavlova		Pavlova		TRUE
6	Singaporean Hokkien Fried Mee		Hokkien Fried Mee		FALSE
7	Boston Crab Meat		Boston Crab Meat		TRUE
8	Inlagd Sill		Inlagd Sill		TRUE
9	Chai		Chai		TRUE
10	Gudbrandsdalsost		Gudbrandsdalsost		TRUE
11	Queso Cabrales		Queso		FALSE
12	Chai		Chai		TRUE
13	Teatime Chocolate Biscuits		Teatime Chocolate Biscuits		TRUE
14	Original Frankfurter grüne Soße		Original Frankfurter grüne Soße		TRUE
15	Côte de Blaye		Côte		FALSE
16	Teatime Chocolate Biscuits		Teatime Chocolate Biscuits		TRUE
17	Röd Kaviar		Röd Kaviar		TRUE
18	Gumbär Gummibärchen		Gummibärchen		FALSE
19	Gorgonzola Telino		Gorgonzola Telino		TRUE
20	Pâté chinois		Pâté chinois		TRUE
21	Gnocchi di nonna Alice		Gnocchi di nonna Alice		TRUE
22	Tourtière		Tourtière		TRUE
23	Gustaf's Knäckebröd		Gustaf's		FALSE

As you can see, TRUE means there is a match and FALSE otherwise. This is how you can easily identify discrepancies between the two lists.

Need to look up unit prices in Excel? Why not use the LOOKUP function.

In this tip we'll show you how to look up unit prices in your workbook using the LOOKUP function in Excel. The LOOKUP function is an alternative method to the more commonly used VLOOKUP function in Microsoft® Excel®.

Manually entering data in your workbook can lead to inaccuracies with your information, you can apply the LOOKUP function to avoid that.

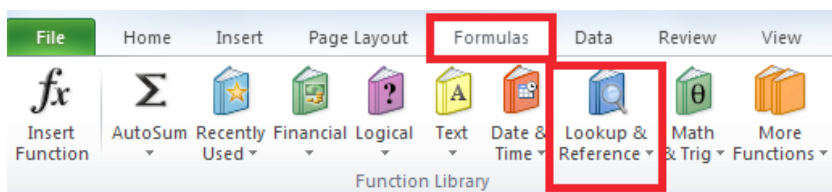
The LOOKUP function can be used to look up data in single row or column range, it searches for the value in the first row or column and returns a value from the same position in the second row or column range selected. The data being searched will be sorted in ascending order.

In our example, we use the LOOKUP function, using the vector form method, to return the unit price for items.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. Place the cursor in **cell C4**. Select the **Formulas Tab**. Then select **Lookup and Reference**.



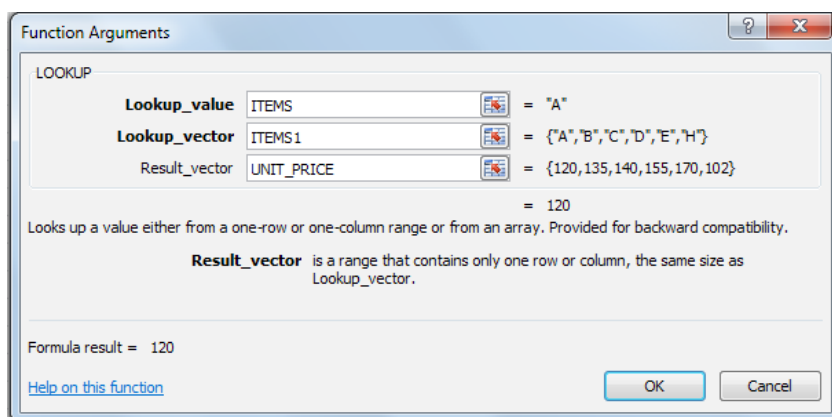
2. From the drop down menu select **LOOKUP** then **OK**.

(NB: By default the Vector will be selected)

3. Place the cursor in the **Lookup_value box** and press **F3**. Select the defined name (**ITEMS**) for the range **B4:B10**.

4. Place the cursor in the **Lookup_vector box** and press **F3**. Select the defined name (**ITEMS1**) for the range **H3:M3**.

5. Place the cursor in the **Result_vector box** and press **F3**. Select the defined name (**UNIT_PRICE**) for the range **H4:M4**. Select **OK**.



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6. Copy the formula down to cell **C10**.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													

ITEM	UNIT PRICE	QTY	SELLING PRICE
A	\$ 120.00	30	\$ 3,600.00
B	\$ 135.00	40	\$ 5,400.00
C	\$ 140.00	67	\$ 9,380.00
D	\$ 155.00	89	\$ 13,795.00
E	\$ 170.00	54	\$ 9,180.00
F	\$ 170.00	34	\$ 5,780.00
H	\$ 102.00	90	\$ 9,180.00

ITEM	A	B	C	D	E	H
UNIT PRICE	\$ 120.00	\$ 135.00	\$ 140.00	\$ 155.00	\$ 170.00	\$ 102.00

The unit prices have been looked up without having to manually enter them. This will ensure that your data is accurate, whilst saving you time and making your process more efficient.

How to create an interactive Scroll Bar in Excel using the OFFSET function

Ever wondered how to create an interactive Scroll Bar in Microsoft® Excel®? Instead of manually typing in a particular month or value, you can use the Scroll Bar control to select the months or values from a list, thus saving your time. In this week's tip we'll show you how by using the Offset function along with the Scroll Bar.

The OFFSET function returns a cell or range of cells that is a specified number of rows and or columns within your spreadsheet. The range of cells is given a starting point with specified height (number of rows) and width (number of columns). You can use the OFFSET function to select a dynamic cell reference.

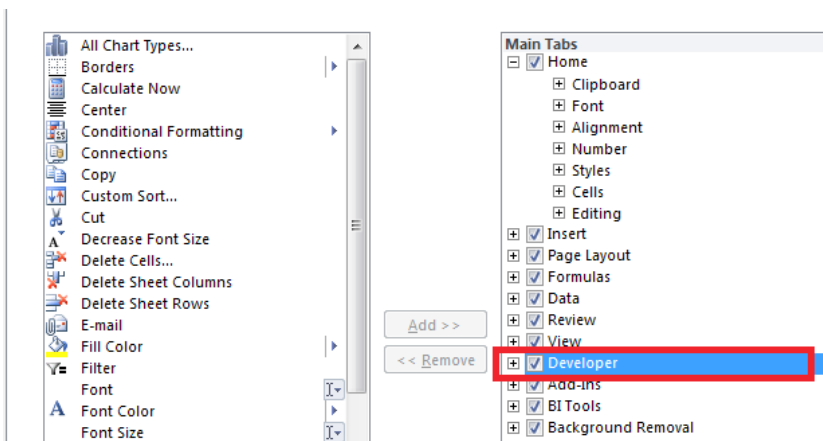
In this example we'll demonstrate how Months can be interactively selected with the Scroll Bar control and the OFFSET function.

Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2010 and 2013

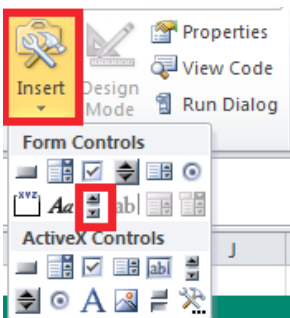
1. Activate the **Developer Tab** in your Excel spreadsheet. (Nb: The Scroll Bar control option is found on the Developer tab.)

-
- Select the **File menu**, then click on **Options**.
- Select **Customize Ribbon**.
- Tick the **Developer** check box, then click **OK**.



2. Insert the **Scroll Bar Control**.

- Select the **Developer** tab, then select **Insert** under the controls group
- Then select the **Scroll Bar** from the **Form Control** group



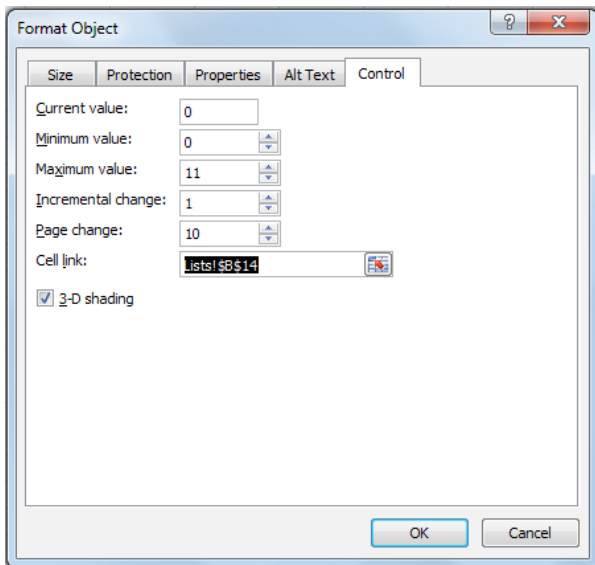
- Cut and paste or place the control on the Dashboard worksheet, in the range **Q2:Q4**.

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3. Format the Scroll Bar Control (**NB:** To make the Scroll Bar control interactive using the OFFSET formula, you first need to change some of the Scroll Bar Control settings.)

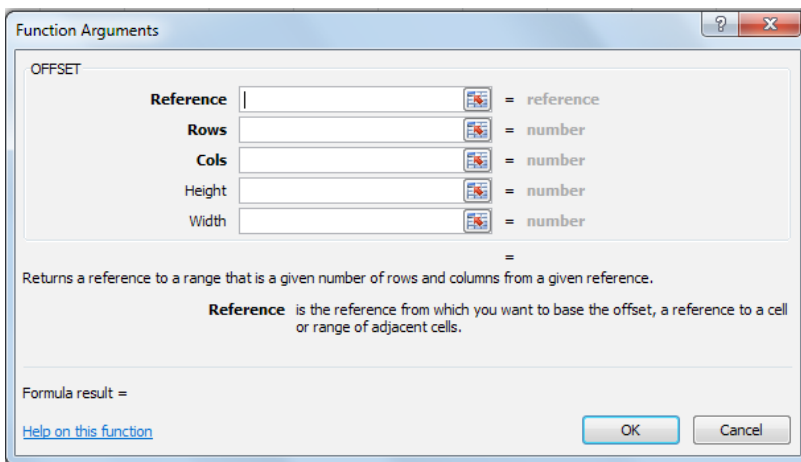
- Right click on the **Scroll Bar Control**, then select the **Format Control menu** item.
- Set the maximum value to **11** (number of months, excluding the starting point which makes it 12).
- Click the **red arrow** (edit reference icon) in the Cell link.
- On the Lists worksheet, select **cell B14** (the output of the Scroll Bar, a number representing the selected month).
- Then select the **red arrow** (edit reference icon) to return to the Format Control window, then select the **OK** button.



4. Using the OFFSET function to return the month name.

- Select the Dashboard worksheet, then select **cell N3**.
- Select the **Formulas** tab, then select **Lookup & Reference**.
- Select **OFFSET**.

Complete the fields as follows:



Reference: the specified starting point.

Rows: Number of rows you want to move from the starting point.

Cols: Number of columns you want to move from the starting point.

Height: This is the size in rows of the range you want to be returned.

Width: This is the size in columns of the range you want to be returned.

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- Select the **red arrow** (edit reference icon) in the Reference.
- Select **cell B1** on the lists worksheet, then select the **red arrow** (edit reference icon) to return.
- Select the **red arrow** (edit reference icon) in the Rows.
- Select **cell B14** on the Lists, then select the red arrow (edit reference icon) to return.
- Place your cursor in the Cols box, enter **0** and select **OK**.

The image shows the 'Function Arguments' dialog box for the OFFSET function. The dialog has a title bar with a question mark and a close button. Inside, the function name 'OFFSET' is displayed. Below it, there are input fields for 'Reference', 'Rows', 'Cols', 'Height', and 'Width'. Each field has a small icon to its right. The 'Reference' field is set to 'Lists!B1' and shows a value of 41275. The 'Rows' field is set to 'Lists!B14' and shows a value of 4. The 'Cols' field is set to '0' and shows a value of 0. The 'Height' and 'Width' fields are empty and show a value of 'number'. Below the input fields, there is a checkbox for 'Volatile' which is checked. A description of the function is provided: 'Returns a reference to a range that is a given number of rows and columns from a given reference.' A note explains that the 'Reference' is the reference from which you want to base the offset. At the bottom, the 'Formula result' is shown as 'Volatile'. There are 'OK' and 'Cancel' buttons at the bottom right, and a 'Help on this function' link at the bottom left.

Function Arguments

OFFSET

Reference: Lists!B1 = 41275

Rows: Lists!B14 = 4

Cols: 0 = 0

Height: = number

Width: = number

= Volatile

Returns a reference to a range that is a given number of rows and columns from a given reference.

Reference is the reference from which you want to base the offset, a reference to a cell or range of adjacent cells.

Formula result = Volatile

[Help on this function](#) OK Cancel

The image shows a portion of an Excel spreadsheet. The columns are labeled L, M, N, and O. Column N is highlighted in yellow. Below the spreadsheet, there is a green rectangular control with a red border. Inside the green box, the text 'Select Month:' is on the left, and 'July' is on the right. To the right of 'July' is a small white box containing two black arrows, one pointing up and one pointing down, indicating a scroll bar control.

L M N O

Select Month: July

The months can now be interactively selected by using the Scroll Bar Control.

How to quickly create a dynamic drop-down list in Excel

A dynamic drop down list in Microsoft® Excel® is a convenient way of selecting data without making changes to the source. Let's say you have a list where you are likely to add or remove values, a dynamic drop down would be the best option to select data. With a dynamic drop-down list, when you delete or add months the list changes to accommodate that action, whereas a normal list does not.

We have written tips on how to create a static and dynamic drop down list using and the Table option. However, in this tip we show you how to create a dynamic drop down list by using Data Validation, OFFSET and COUNTA functions.

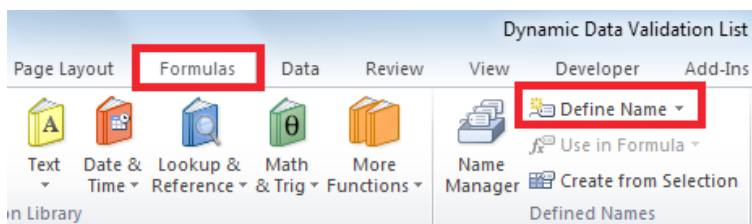
We learnt in our previous tip that the OFFSET function is used for creating dynamic data ranges. The COUNTA function counts the number of cells that are not empty in a range. Data Validation is used for restricting what type of data should or can be entered into a range.

Download the [workbook](#) to practice

Applies to: Microsoft Excel 2010 and 2013

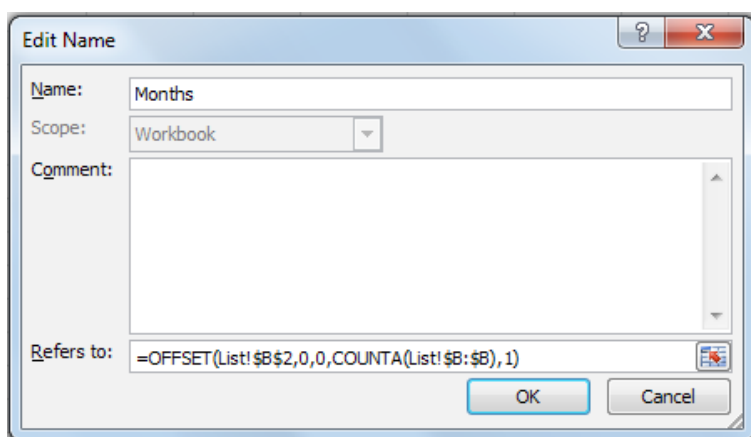
1. We start by creating a defined name.

a. Select the **Formulas Tab**, then **Define**.



b. Enter **Months** under the Name text box.

c. Enter **=OFFSET(List!\$B\$2,0,0,COUNTA(List!\$B:\$B),1)** under the **Refers to** text box.

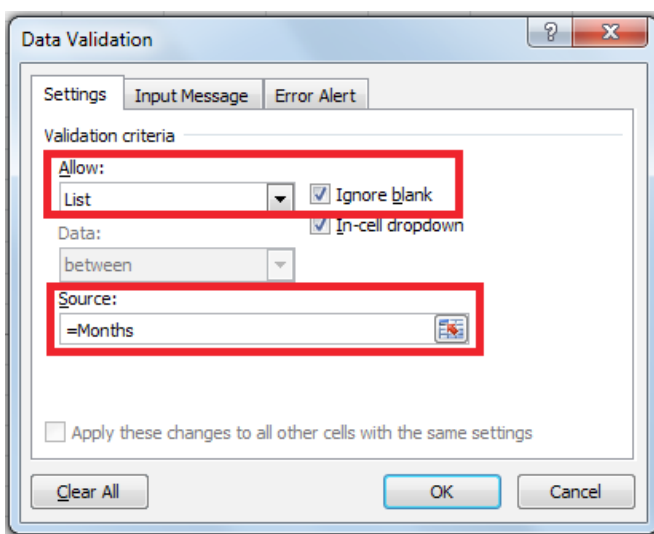


Here is a breakdown of what the formula represents:

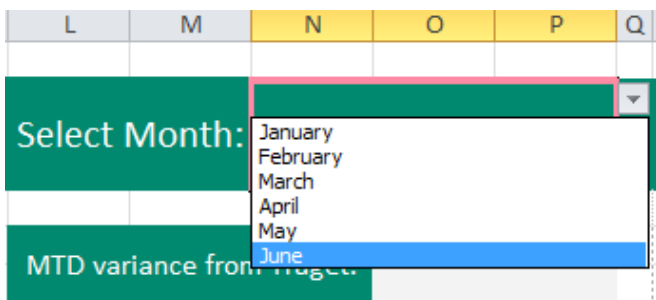
- \$B\$2 refers to the reference or starting point.
- The number of rows you want to move from the starting point is 0.
- The number of columns you want to move from the starting point is 0.
- The height in number of rows is COUNTA(List!\$B:\$B).

COUNTA(List!\$B:\$B) counts the number of values that are not empty in column B. When you add a value to the range, the number of values that are not empty will increase. The number of values that are not empty will decrease when you delete a value from the range. Therefore the named range expands when you add a value and contracts when you delete a value.

- The width in number of columns is 1.
- d. Select **OK**.
2. To create a data validation list:
- a. Select the **Dashboard** worksheet, then select **cell N2**.
 - b. Select **Data Validation** under the **Data Tab**.
 - c. Select **List** under Allow.
 - d. Place the cursor in the **Source** text box and press **F3**. Then select **Months**.



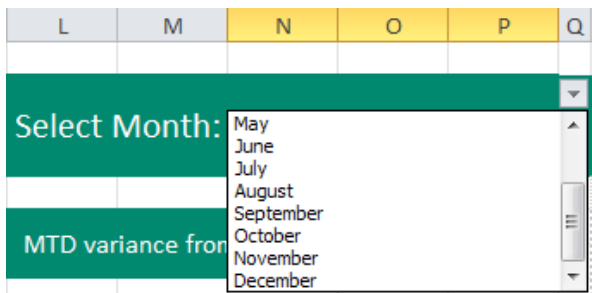
- e. Select **OK**.
3. Select the drop down list in **cell Q2**. There are only six months in the list.



4. Select the **List** worksheet and increase the number of months to **December(12)**.
5. Select the drop down list in cell **Q2** in the dashboard worksheet. The number of months has increased to 12.

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Based on the above example, the number of months in the data validation list will decrease if you delete some values from the range B2 to B13 on the list worksheet. Therefore a data validation list has been created, allowing flexibility when selecting data.

4 Easy steps to calculating formulas with the Paste Special Command

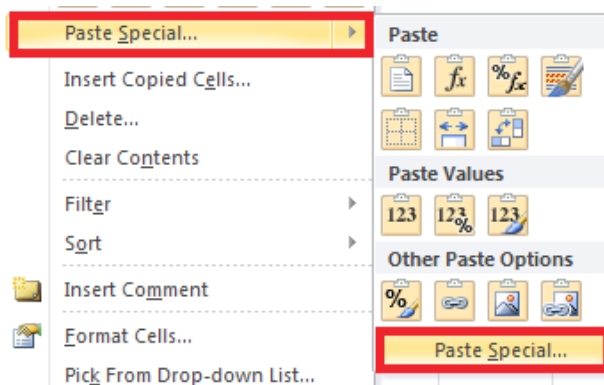
Have you ever wondered how to use the formulas operations under the Paste special command? You can divide, add, multiply and subtract values when you copy and paste.

Let's say, you want to quickly convert values from millions to thousands when you copy and paste, you can use the paste special divide formula. This command will save you time creating normal formulas to carry out this instruction. Furthermore, the values will be easy to analyse when converted to a lower value.

Download the [workbook](#) to practice

Applies to: Microsoft® Excel® 2010 and 2013

1. Start by highlighting the divider range, **D3 to D20**.
2. Right click and copy. Then highlight the values range, **C3 to C20**.
3. Right click and select **Paste Special**.



4. Select the **divide option** and click **OK**.

Value	Divider
9000	1000
8000	1000
4000	1000
7000	1000
5000	1000
6000	1000
7000	1000
8000	1000
12000	1000
15000	1000
30000	1000
17000	1000
18000	1000
20000	1000
19000	1000
21000	1000
45000	1000
12000	1000

The values have been quickly converted to thousands without using the normal formulas. This is a quick and easy way of applying formulas to values. It is important to note that the Paste Special command will only be enabled if you copy the data. It will be disabled if you use the cut option to select the data.

Easy steps to using the compound interest calculator in Excel

My daughter just completed a project of creating a piggy bank at school. This reminded me of the importance of saving. The return on investment is often determined by interest rates and this is why investors or anyone who wants to save chooses the right moment to make an investment.

In this tip we explain how to calculate compound interest using Microsoft® Excel®.

Since there is no standard function to calculate compound interest in Excel, we'll show you how to create a custom compound interest function.

Download the [workbook](#) to practice

Applies to: Microsoft® Excel® 2010 and 2013

Compound interest is interest paid on both the original amount of money and on the interest it has already earned. Follow the steps below as we explain how:

1. Press **ALT & F11** to start the Visual Basic editor.
2. Select Module from the Insert menu.
3. Copy and Paste the following code:

```
Function Compound_Rate(PV As Double, R As Double, N As Double) As Double  
Compound_Rate = PV*(1+R)^N  
End Function
```

Note:

- A function returns a value.
- Double is a data type that has a fractional component.
- PV is the Present value of the Investment.
- R is the interest rate.
- N is the number of investment periods.

4. Save the changes.
5. Select the **File menu**, then Close and Return to Microsoft Excel.
6. Press **F12** to Save As.
7. Select **Excel Macro Enabled workbook** under Save As Type.
8. Place the cursor in **cell B5**.
9. Type: **=Compound_Rate(B1,B2,B3)** and press enter.

Note:

- B1 is the Present Value of the investment.
- R is the interest rate.
- N is the number of investment periods.

The compound interest is **900** as displayed below:

	A	B
1	Present Value	500
2	Interest Rate	0.8
3	Investment Period	1
4		
5	Compound Interest	900

We have created a custom function to calculate compound interest in an easy and accurate manner.

How to calculate a deposit or down payment in Excel

Purchasing a car or a house is usually a pleasant experience for the buyer. However, most financial institutions require a deposit or down payment to be made towards the total purchase price.

In this week's tip, we share how to calculate the deposit or down payment for a car. For instance, the cost of the car could be \$15,000 to be repaid over four years at 3% per period. Furthermore, you may want to keep the monthly payment at \$400 per month, but need to calculate the deposit. This is how it can be done:

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. We are going to use the following formula:

=Purchase Price-PV(Rate,Nper,-Pmt)

- PV: calculates the loan amount.
- The loan amount will be subtracted from the purchase price to get the deposit amount.
- Rate: is the interest rate per period. It will be divided by 4 if per quarter or 12 if it's per annum.
- Nper: is the total number of payment periods in an investment, which will be 48(4*12).
- Pmt: is the payment made each period.

2. Place the cursor in **cell C6** and enter the formula below.

=C2-PV(C3/12,C4,-C5)

3. This will give you **\$3,071.48** as the deposit.

	A	B	C
1			
2		PURCHASE PRICE	\$ 15,000.00
3		RATE	3%
4		NPER	48
5		PMT	\$ 400.00
6		DEPOSIT	\$ (3,071.48)

By using this method you can calculate the deposit for a car or house using an easy formula.

Learn how to extract more than one column of data with a single VLOOKUP formula in Excel

It's over 10 years since I started training Microsoft® Excel® to corporate clients. During training sessions, delegates usually ask questions on how they can use Excel to help them become more effective in their work. Last week, a financial manager asked me how she could easily look up more than one field of data from a table with a single VLOOKUP formula.

She wanted to extract the product name, customer name and selling price using one VLOOKUP formula. Her concern was the time it took to extract one field. I therefore, decided to write this tip with a view of helping someone save time and increase productivity.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. We are going to extract the product name, customer name and selling price with one VLOOKUP formula. This is the formula we are going to use:

=VLOOKUP(Lookup_value,Table Array,{3,4,6},Range_Lookup)

- **Lookup_Value** is the common field between the data range and the extraction table.
- **Table Array** is the source data range.
- **The curly brackets** represent the position of the fields to be extracted in the source data range. This is not linked to the column letter, but it is the position of the field to be extracted within the table.
- **Range_Lookup** is either an exact or approximate match

2. Highlight the data range **J2 to L2**.

3. Type the formula : **=VLOOKUP(I2,Data_Source,{3,4,6},0)** and press **CTRL +SHIFT + ENTER**.

- **Data_Source** is the named range for the data table. Press **F3** to display the named ranges and select **Data_Source**.
- **0** means that an exact match is required.

4. Copy the formula for all three columns.

I	J	K	L
Document Number	Customer Name	Product Name	Selling Price
IN000010	Fix Right Plumbers	Serenade Acrylic Cowrie Oval	\$ 23,192.00
IN000017	R. B. James	Noce De Grade	\$ 10,392.00
IN000018	W. Smith	Hygenix Almond Toilet	\$ 3,795.00
IN000019	Wet 'n Wild Plumbers	Rose De Grade	\$ 1,299.00
IN000020	T. Phillips	Serenade Acrylic Cowrie Oval	\$ 14,495.00
IN000021	TG Plumbers	Tm918 Natural Clear Trimati Shower Door	\$ 2,337.00
IN000022	Action Plumbers	Serenade Acrylic Piazza Conversion Bath	\$ 8,697.00
IN000023	Plumbwave	Serenade Acrylic Cowrie Oval	\$ 5,798.00
IN000027	Surefix	Quadrant 900 White Clear Shower Door	\$ 23,391.00
IN000028	Parkin Plumbers	CE900 White Clear Corner Entry Shower Door	\$ 11,893.00
IN000029	Parkin Plumbers	Saphire Sink Mixer	\$ 1,393.00
IN000030	Trench Plumbers	Hygenix Almond Toilet	\$ 3,036.00
IN000031	Brenlin Plumbers	Noce De Grade	\$ 2,598.00
IN000033	Surefix	Serenade Acrylic Cowrie Oval	\$ 31,889.00
IN000034	Action Plumbers	Serenade Acrylic Cowrie Oval	\$ 8,697.00

You can extract more than one column of data with a single VLOOKUP formula, instead of one field at a time. This will help save you time and increase your productivity.

2 Easy steps to help you look up data in Excel using multiple criteria

We showed you how to extract more than one column of data with a single Vlookup formula. However, if you want to look up data with multiple criteria then you can use the INDEX and MATCH functions.

You can look up data that meets multiple criteria and overcome the limitations of the Vlookup, thus saving you time and making your process more efficient.

Follow the example below, as I explain how to use the invoice number and order number to extract the customer's name.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013.

1. Place the cursor in cell B4 and enter the following formula:

=INDEX(Data_Source,MATCH(B2&B3,Invoice_Number&Order_Number,0),4)

- To display the data range for the entire table, place the cursor after "=INDEX(".
> Press **F3** and select **Data_Source**.
- B2&B3 represents the invoice number and order number respectively.
- To display the data range for the invoice number, place the cursor after "MATCH(B2&B3,".
> Press **F3** and select Invoice_Number.
- To display the data range for the order number ,place the cursor after "MATCH(B2&B3,Invoice_Number&".
> Press F3 and select Order_Number.
- 0 means an exact match should be found.
- 4 is the position of the customer name field within the main table range.

2. Press **CTRL +SHIFT +ENTER** because it is an array formula. Check the link below for more details on the array formula.

	A	B	C	D
1				
2	Document Number	IN000017		
3	Order No	OR08		
4	Customer Name	R. B. James		
5				
6	Invoice Number	Order Number	Date	Customer Name
7	IN000010	OR01	March 02, 2009	Fix Right Plumbers
8	IN000011	OR02	March 02, 2009	F.H Travisham
9	IN000012	OR03	March 01, 2009	P. Jones
10	IN000013	OR04	March 20, 2009	T. Phillips
11	IN000014	OR05	March 01, 2009	S. Ngubane
12	IN000015	OR06	March 02, 2009	TG Plumbers
13	IN000016	OR07	March 01, 2009	T. Chetty
14	IN000017	OR08	March 01, 2009	R. B. James

By using this formula you can look up data with multiple criteria. It will let you analyze your data quicker and help save time! This will enable you to analyze data quickly.

NB: Depending on your computers region settings, if you encounter any problems with the attached tip formula, try and replace the ',' (comma) with a ';' (semi-colon) where applicable.

How to quickly round off numbers using the ROUND function in Excel

Anyone who works with figures in Microsoft® Excel® knows the importance of quickly rounding off numbers. Luckily Excel has an easy function that allows you to round off numbers without any hassle.

Instead of clicking the increase or decrease decimal options on the ribbon, you can use the ROUND function to round off numbers to a specified number of decimal digits. In the next tip we will explain how to round off seconds to minutes using the MROUND function.

Download the [workbook](#) to practice

Applies to: Microsoft® Excel® 2010 and 2013

1. Place the cursor in **cell B2**.
2. Type **=ROUND(A2,2)** and press **Enter**.
 - A2 is the cell reference for the number you want to round.
 - 2 is the number of digits to which you want to round.
 - Negative rounds to the left of the decimal point and zero to the nearest integer.
3. Copy down the formula.

	A	B
1	Before	After
2	368.58712	368.59
3	652.25463	652.25
4	652.3645	652.36
5	761.28156	761.28
6	855.362	855.36
7	7452.3561	7452.36
8	7458.123	7458.12
9	7895.52638	7895.53
10	7895.6342	7895.63
11	8597.54826	8597.55
12	9543.5478	9543.55
13	9863.254	9863.25
14	98563.35476	98563.35

As you can see the numbers have been rounded off to 2 digits with an easy formula, thus saving you time and making your process more efficient.

Learn how to easily round off time values in Excel using the MROUND function

Working with time values comes with its own challenges. One of the issues is how to round off time values from seconds to minutes or minutes to hours.

You can use the MROUND function to round off time values. The MROUND function returns a number rounded to the nearest instance of a specified multiple.

It's easier to manipulate time values if they are rounded off. So, if you work with time values you will find this tip useful, especially HR personnel, IT security professionals, stock controllers etc.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. Start by formatting numbers to the time format.
 - Highlight the range **B3:B9**.
 - Right click and select **format cells**.
 - Select **custom** under the number tab.
 - Select **h:mm:ss** then select **OK**.
2. To round off to the nearest hour.
 - Place the cursor in **cell C3**.
 - Type **=MROUND(B3,"1:00")**.
 - Press **Enter** and copy the formula down.
3. To round off to the nearest minute.
 - Place the cursor in **cell D3**.
 - Type **=MROUND(B3,"0:01")**.
 - Press **Enter** and copy the formula down.

	A	B	C	D
1				
2		Time	Nearest Hour	Nearest Minute
3		20:45:39	21:00:00	20:46:00
4		16:52:32	17:00:00	16:53:00
5		17:35:34	18:00:00	17:36:00
6		18:45:36	19:00:00	18:46:00
7		5:53:41	6:00:00	5:54:00
8		8:30:35	9:00:00	8:31:00
9		3:45:39	4:00:00	3:46:00

The time values have been rounded to the nearest hour or minute. Only minutes or seconds that are greater than or equal to 30 are rounded off.

3 Easy steps to display the date difference in years, months and days in Excel

Recently an HR consultant asked how she could show the time served by employees in years, months and days. She currently only displays the time served in years and wanted to be more specific. An inventory controller also asked me a similar question in relation to stock movement.

Therefore we will practice using the DATEDIF and concatenate functions. The DATEDIF function returns the difference between two dates and the concatenate function joins the various formulas into one function.

Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2010 and 2013

1. Select the Practice worksheet.
2. Place the cursor in **cell C4**.
3. Enter the formula below.

=DATEDIF(A4,B4,"Y") & " Years, " & DATEDIF(A4,B4,"YM") & " Months, " & DATEDIF(A4,B4,"MD") & " Days,"

- The first **DATEDIF** formula returns the date difference in years.
- A4 represents the start date and B4 the end date.
- The second **DATEDIF** formula returns the date difference in months.
 - **'YM'** displays the remainder of the months after extracting the years.
 - **'M'** will display the total number of months.
- The third formula returns the date difference in days.
 - **'MD'** displays the remainder of the days after extracting the months.
 - **'D'** will display the total number of days.
- The ampersands (**&**) joins the three formulas into one.

1			
2			
3	Start Date	End Date	Result
4	2012-01-29	2015-01-15	2 Years, 11 Months, 17 Days,
5	2010-02-21	2014-09-13	4 Years, 6 Months, 23 Days,
6	2011-03-22	2013-08-19	2 Years, 4 Months, 28 Days,
7	2013-04-23	2014-11-11	1 Years, 6 Months, 19 Days,
8	2014-05-24	2015-05-17	0 Years, 11 Months, 23 Days,
9	2012-06-25	2014-02-21	1 Years, 7 Months, 27 Days,
10	2009-07-26	2015-12-05	6 Years, 4 Months, 9 Days,

The **DATEDIF** formula will have to be typed in because it is not available on the functions list. It is used for returning the difference between the start and end dates. However, as in this example, it can be nested to create a custom formula .

Easily link a worksheet name to a cell using the MID and FIND functions in Excel

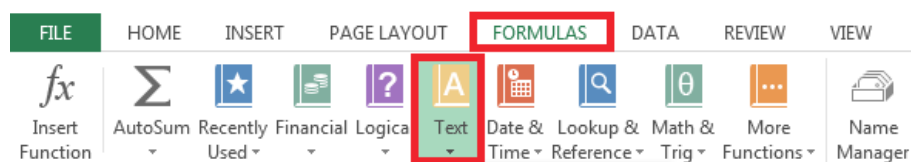
Reports are often prepared and presented on a regular basis. Some businesses often use Microsoft® Excel® to present their reports. Report headings can contain worksheet names and that is why it is important to link worksheet names to a cell. This can be achieved by using the MID and FIND functions in Excel. This will save you the time of re-typing the worksheet names in the report headings.

Using the steps below you can have your worksheet names for each month in a workbook and display the worksheet names in the report heading automatically.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. Select **cell C1**. Then select the Formulas.
2. Select **Text** and then **MID** from the text functions list.



3. Place the cursor in the Text box and enter **CELL("filename",A1)**.

The CELL function returns information about the formatting, location, or contents of a cell.

- It has two arguments info_type and reference.
- Info_type: text value that specifies the information type to be returned.
- Reference: Is a cell that you want information about.
- "Filename" will return the path of the filename.

C:\Excel Tips\[Linking a worksheet name to a cell.xlsm]Janaury

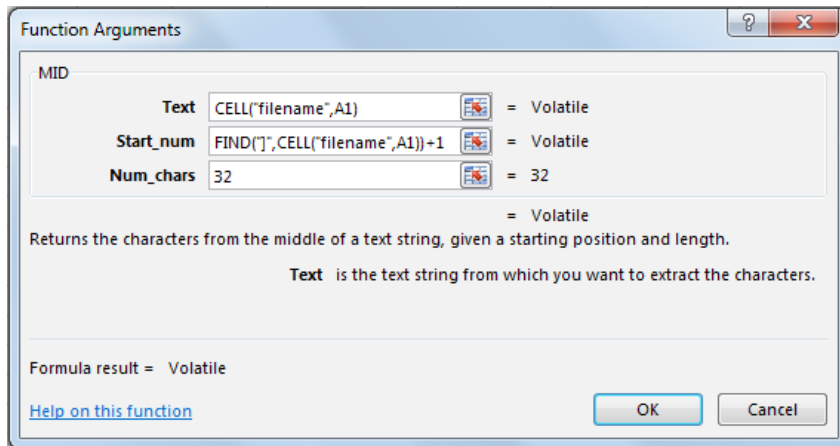
4. Place the cursor in the **Start_num** box and enter **FIND("]",CELL("filename",A1))+1**.
- The location within the file path name where to start extracting the worksheet name.
 - "]" instructs Microsoft® Excel® to find the position for the square bracket.
 - +1 adds 1 to the position returned by searching for the square bracket.

30 Excel Tips & Tricks

Functions & Formulas

5. Place the cursor in the **Num_Chars** box and enter **32**, then select **OK**.

- 32 is the maximum number of characters for a worksheet name.



The worksheet name will be linked to the cell automatically, thus saving you time and effort. In addition to this nifty trick, whenever the worksheet name is changed, it will automatically update the cell it is linked to.

30 Excel Tips & Tricks

Data Formatting

How to customize number formats

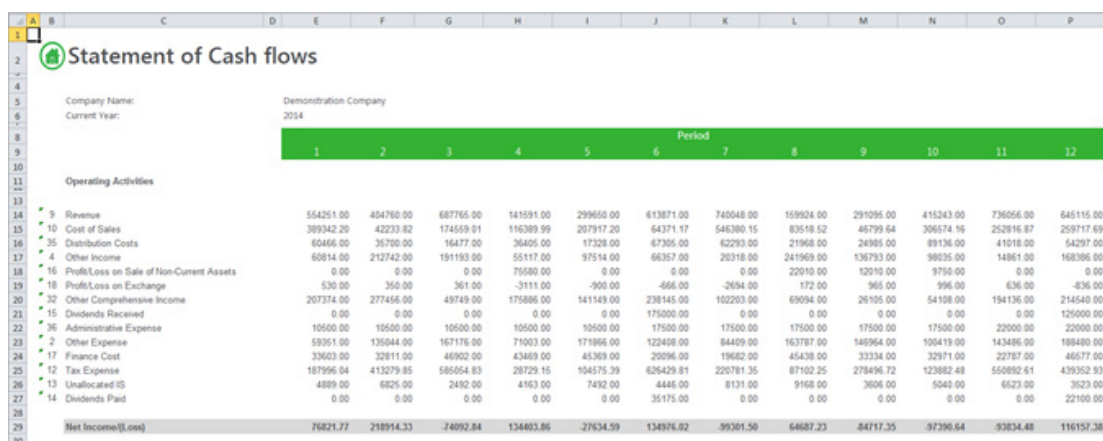
Having a sufficient amount of cash is key to maintaining a healthy business, which is why it's crucial to track where your cash comes from and where it goes. We've provided you with a cash flow statement template which you can customise. In this tip, we show you how you can customise number formats.

Conditional formatting allows you to change the font, size and colour of text in cells (among other things). By using Custom Formats you can change how the data itself appears without having to change the data values in the cells. This can make data easier to read, particularly with financial information.

Download your [cash flow statement template](#) to practice this exercise.

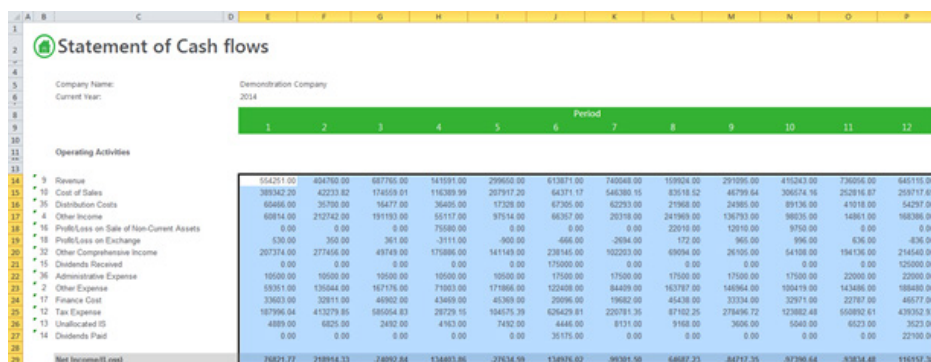
Applies to: Microsoft® Excel® 2007, 2010 and 2013

1. Open the exercise workbook. You will see a part of a cash flow statement report. You will see that a number of cells, such as some cells in row 19, are actually negative values.

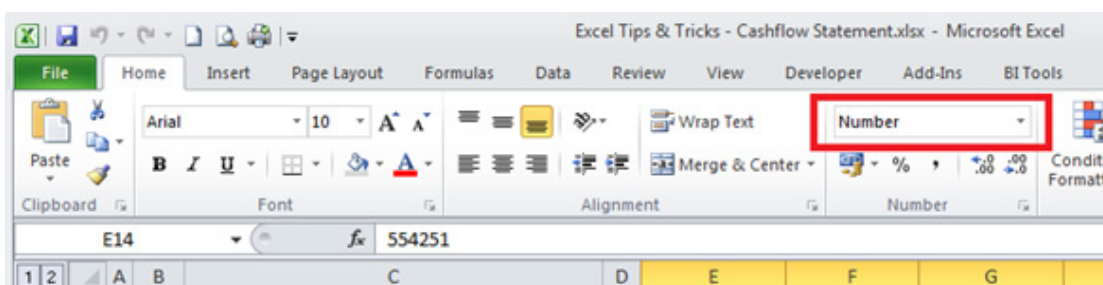


	1	2	3	4	5	6	7	8	9	10	11	12
Revenue	554251.00	404760.00	687765.00	141591.00	299650.00	613871.00	740048.00	159924.00	291095.00	415243.00	736056.00	645115.00
Cost of Sales	389342.20	42233.82	174559.01	116389.99	207917.20	64371.17	546380.15	83518.52	46799.64	306574.16	252816.87	259717.69
Distribution Costs	60466.00	35700.00	16477.00	36405.00	17328.00	67305.00	62293.00	21968.00	24980.00	89136.00	41018.00	54297.00
Other Income	60814.00	212742.00	191193.00	55117.00	97514.00	66357.00	20318.00	241969.00	136793.00	98035.00	14861.00	168386.00
Profit/Loss on Sale of Non-Current Assets	0.00	0.00	0.00	75880.00	0.00	0.00	0.00	22010.00	12010.00	9750.00	0.00	0.00
Profit/Loss on Exchange	530.00	350.00	361.00	-3111.00	-900.00	-666.00	-2694.00	172.00	965.00	996.00	636.00	-836.00
Other Comprehensive Income	207374.00	277456.00	49749.00	175886.00	141143.00	238145.00	102203.00	69094.00	26105.00	54198.00	194136.00	214540.00
Dividends Received	0.00	0.00	0.00	0.00	0.00	175000.00	0.00	0.00	0.00	0.00	0.00	125000.00
Administrative Expense	10500.00	10500.00	10500.00	10500.00	10500.00	17500.00	17500.00	17500.00	17500.00	17500.00	22000.00	22000.00
Other Expense	59351.00	135044.00	167176.00	71003.00	171866.00	122408.00	84409.00	163787.00	140964.00	100419.00	143486.00	188480.00
Finance Cost	33603.00	32811.00	40902.00	43409.00	45369.00	20096.00	19682.00	45438.00	33334.00	32971.00	22787.00	46577.00
Tax Expense	187996.04	413279.85	580584.83	28729.15	104575.39	626429.81	220781.35	87102.25	278496.72	123882.48	550892.61	439352.93
Unallocated IS	4889.00	6825.00	2492.00	4163.00	7492.00	4446.00	8131.00	9168.00	3606.00	5040.00	6523.00	3523.00
Dividends Paid	0.00	0.00	0.00	0.00	0.00	35175.00	0.00	0.00	0.00	0.00	0.00	22100.00
Net Income(Loss)	76821.77	218914.33	24092.84	134403.86	27634.59	134976.02	99301.50	64887.23	84717.35	97390.64	93834.48	116157.38

2. Select cells **E14 to P29**. From the Numbers group, on the Home tab, the drop down list identifies that these cells are currently formatted as Number. To format them as a currency values click the drop down arrow of the Format box and select **Currency**.

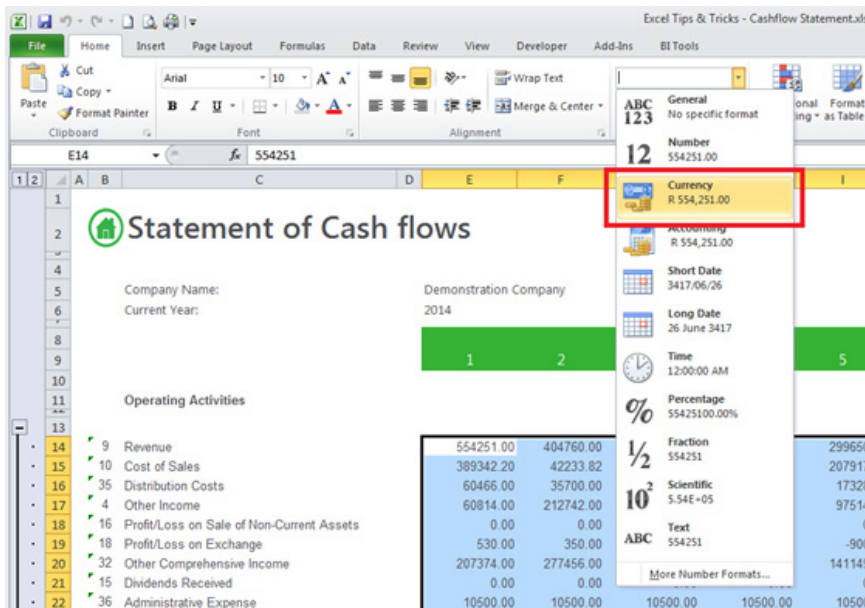


	1	2	3	4	5	6	7	8	9	10	11	12
Revenue	554251.00	404760.00	687765.00	141591.00	299650.00	613871.00	740048.00	159924.00	291095.00	415243.00	736056.00	645115.00
Cost of Sales	389342.20	42233.82	174559.01	116389.99	207917.20	64371.17	546380.15	83518.52	46799.64	306574.16	252816.87	259717.69
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Profit/Loss on Sale of Non-Current Assets	0.00	0.00	0.00	75880.00	0.00	0.00	0.00	22010.00	12010.00	9750.00	0.00	0.00
Profit/Loss on Exchange	530.00	350.00	361.00	-3111.00	-900.00	-666.00	-2694.00	172.00	965.00	996.00	636.00	-836.00
Other Comprehensive Income	207374.00	277456.00	49749.00	175886.00	141143.00	238145.00	102203.00	69094.00	26105.00	54198.00	194136.00	214540.00
Dividends Received	0.00	0.00	0.00	0.00	0.00	175000.00	0.00	0.00	0.00	0.00	0.00	125000.00
Administrative Expense	10500.00	10500.00	10500.00	10500.00	10500.00	17500.00	17500.00	17500.00	17500.00	17500.00	22000.00	22000.00
Other Expense	59351.00	135044.00	167176.00	71003.00	171866.00	122408.00	84409.00	163787.00	140964.00	100419.00	143486.00	188480.00
Finance Cost	33603.00	32811.00	40902.00	43409.00	45369.00	20096.00	19682.00	45438.00	33334.00	32971.00	22787.00	46577.00
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Unallocated IS	4889.00	6825.00	2492.00	4163.00	7492.00	4446.00	8131.00	9168.00	3606.00	5040.00	6523.00	3523.00
Dividends Paid	0.00	0.00	0.00	0.00	0.00	35175.00	0.00	0.00	0.00	0.00	0.00	22100.00
Net Income(Loss)	76821.77	218914.33	24092.84	134403.86	27634.59	134976.02	99301.50	64887.23	84717.35	97390.64	93834.48	116157.38



30 Excel Tips & Tricks

Data Formatting

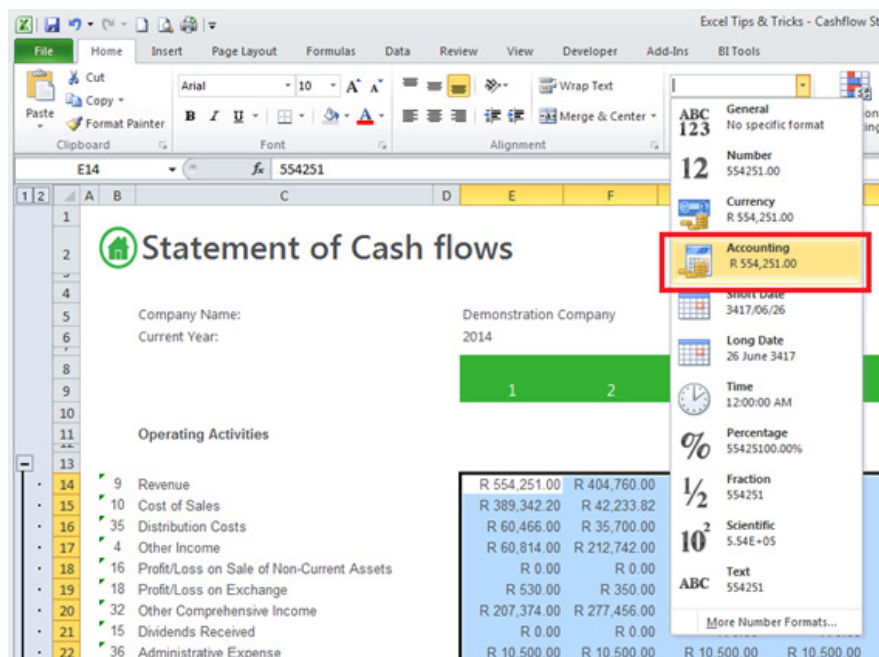


The numbers will now change to currency values without you having to change the data. In this example, we've used South African Rands (R).

Period											
1	2	3	4	5	6	7	8	9	10	11	12

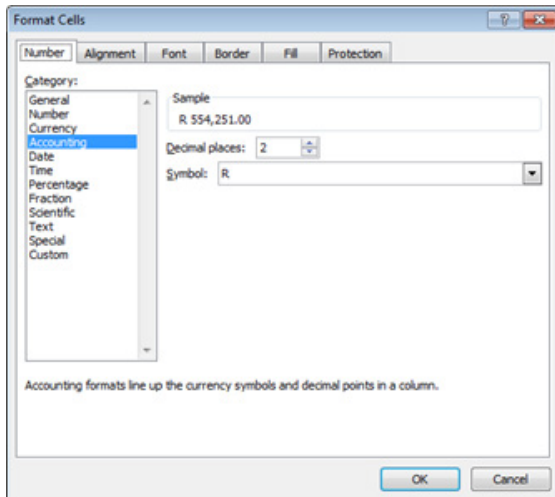
R 554,251.00	R 404,760.00	R 687,765.00	R 141,591.00	R 259,650.00	R 613,871.00	R 740,048.00	R 159,924.00	R 291,095.00	R 415,243.00	R 736,056.00	R 645,115.00
R 389,342.20	R 42,233.82	R 174,559.01	R 116,389.99	R 207,917.20	R 64,371.17	R 546,380.15	R 83,518.52	R 46,799.64	R 306,574.16	R 252,816.87	R 259,717.69
R 60,466.00	R 35,700.00	R 16,477.00	R 36,405.00	R 17,328.00	R 67,305.00	R 62,293.00	R 21,968.00	R 24,985.00	R 89,136.00	R 41,018.00	R 54,297.00
R 60,814.00	R 212,742.00	R 191,193.00	R 55,117.00	R 97,514.00	R 66,357.00	R 20,318.00	R 241,969.00	R 136,793.00	R 98,035.00	R 14,861.00	R 168,386.00
R 0.00	R 0.00	R 0.00	R 75,580.00	R 0.00	R 0.00	R 0.00	R 22,010.00	R 12,010.00	R 9,750.00	R 0.00	R 0.00
R 530.00	R 350.00	R 361.00	-R 3,111.00	-R 900.00	-R 666.00	R 2,694.00	R 172.00	R 965.00	R 996.00	R 636.00	-R 836.00
R 207,374.00	R 277,456.00	R 49,749.00	R 175,886.00	R 141,149.00	R 238,145.00	R 102,203.00	R 69,094.00	R 26,105.00	R 54,108.00	R 194,136.00	R 214,540.00
R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 125,000.00
R 10,500.00	R 10,500.00	R 10,500.00	R 10,500.00	R 10,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 22,000.00	R 22,000.00
R 59,351.00	R 135,044.00	R 167,176.00	R 71,003.00	R 171,866.00	R 122,408.00	R 84,409.00	R 163,787.00	R 146,964.00	R 100,419.00	R 143,486.00	R 188,480.00
R 33,603.00	R 32,811.00	R 46,902.00	R 43,469.00	R 45,369.00	R 20,096.00	R 19,682.00	R 45,438.00	R 33,334.00	R 32,971.00	R 22,787.00	R 46,577.00
R 187,996.04	R 413,279.85	R 585,054.83	R 28,729.15	R 104,575.39	R 626,429.81	R 220,781.35	R 87,102.25	R 278,496.72	R 123,882.48	R 550,892.61	R 439,352.93
R 4,889.00	R 6,825.00	R 2,492.00	R 4,163.00	R 7,492.00	R 4,446.00	R 8,131.00	R 9,168.00	R 3,606.00	R 5,040.00	R 6,523.00	R 3,523.00
R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 22,100.00
R 76,821.77	R 218,914.33	R 74,092.84	R 134,403.86	R 27,634.59	R 134,976.02	R 99,301.50	R 64,687.23	R 84,717.35	R 97,390.64	R 93,834.48	R 116,157.38

3. If you'd like to apply accounting formatting, click the drop-down arrow of the Format box and select **Accounting**. You will see that the format of the figures will change and zero values will become dashes.

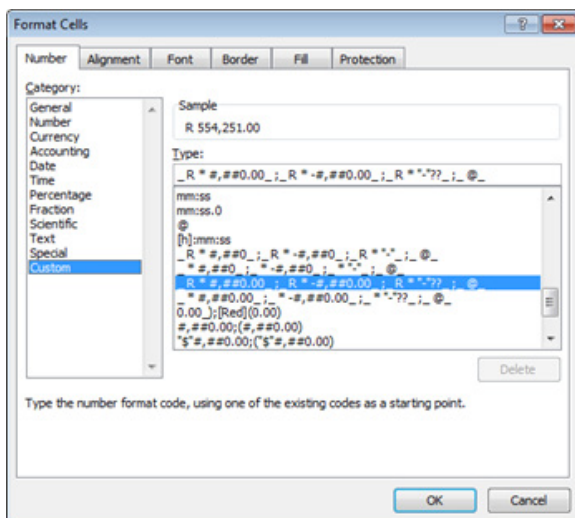


To make it easier for you to recognise negative values, you can change the format of negative values so that they are distinct. In this case, you can change the color of the values to red, and have the values in brackets. Here's how:

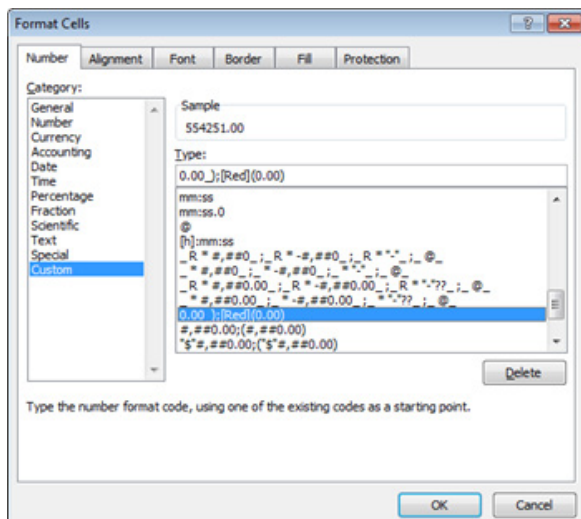
4. Press **CTRL + 1**. This opens the Format Cells window.



5. In the Category window, select **Custom**.



6. In the Type: window, select the **0.00_);[Red](0.00)** option, then click **OK**.



30 Excel Tips & Tricks

Data Formatting

You will now see the negative values are now in red, with brackets around them.

Statement of Cash flows												
Company Name: Demonstration Company												
Current Year: 2014												
Period												
	1	2	3	4	5	6	7	8	9	10	11	12
Operating Activities												
Revenue	554251.00	434760.00	687765.00	141891.00	299050.00	613871.00	740048.00	119924.00	291095.00	415243.00	736266.00	845115.00
Cost of Sales	389342.20	422323.82	1746559.01	116308.99	207917.20	64371.17	548386.15	83518.52	46799.64	306274.16	252816.87	259177.69
Distribution Costs	60466.00	35700.00	16477.00	36405.00	17328.00	87385.00	62293.00	21968.00	24885.00	89136.00	41818.00	54287.00
Other Income	60814.00	212742.00	191193.00	55117.00	97514.00	66367.00	20318.00	241969.00	136793.00	98036.00	14861.00	168386.00
Profit/Loss on Sale of Non-Current Assets	0.00	0.00	0.00	75580.00	0.00	0.00	0.00	22610.00	12910.00	9750.00	0.00	0.00
Profit/Loss on Exchange	530.00	350.00	361.00	(2111.00)	(960.00)	(866.00)	(2894.00)	172.00	965.00	996.00	636.00	(836.00)
Other Comprehensive Income	207374.00	277456.00	437149.00	175006.00	141149.00	238445.00	102293.00	69004.00	26105.00	54108.00	194136.00	214540.00
Dividends Received	0.00	0.00	0.00	0.00	0.00	175000.00	0.00	0.00	0.00	0.00	0.00	125000.00
Administrative Expense	10500.00	10500.00	10500.00	10500.00	10500.00	17500.00	17500.00	17500.00	17500.00	17500.00	22000.00	22000.00
Other Expense	59351.00	130644.00	167176.00	71063.00	171866.00	122408.00	84409.00	163787.00	148964.00	100419.00	143486.00	188480.00
Finance Cost	33603.00	32811.00	46902.00	43449.00	40369.00	20996.00	19642.00	45436.00	33334.00	32871.00	22787.00	46577.00
Tax Expense	187996.04	413279.85	585054.83	28729.15	104575.39	626429.81	226781.35	87162.25	278496.72	123882.48	550032.41	439352.93
Unallocated IS	4889.00	6825.00	2492.00	4163.00	7492.00	4446.00	8131.00	9168.00	3606.00	5040.00	6023.00	3523.00
Dividends Paid	0.00	0.00	0.00	0.00	0.00	35175.00	0.00	0.00	0.00	0.00	0.00	22100.00
Net Income(Loss)	76271.77	218154.33	(78892.84)	134803.96	(27534.56)	134935.62	(90301.50)	64687.23	(84717.30)	(67706.64)	(93534.68)	116152.38

While conditional formatting can change the visual format of a cell, adjusting the actual format of the cell can change how the data itself is represented, without having to manually type more characters or make physical adjustments to the text.

How to replace a concatenation formula

We shared a cash flow statement template with you and showed you how to change the way your data appears to make it easier to read, using Custom Formats. This time around, we want to show you how to replace a concatenation formula in the same template, still using Custom Formats.

Download your [cash flow statement template](#).

Applies to: Microsoft® Excel® 2007, 2010 and 2013

Open your template. You will see a part of a cash flow statement report.

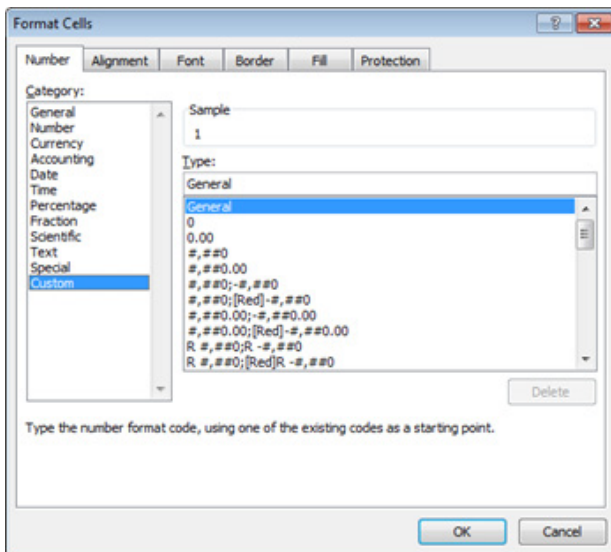
	1	2	3	4	5	6	7	8	9	10	11	12
Operating Activities												
Revenue	R 154,261.00	R 454,760.00	R 687,760.00	R 141,591.00	R 299,650.00	R 613,871.00	R 740,548.00	R 109,324.00	R 291,095.00	R 416,243.00	R 736,566.00	R 645,115.00
Cost of Sales	R 389,342.00	R 42,233.82	R 174,559.01	R 116,389.99	R 207,917.20	R 64,371.17	R 546,380.15	R 83,518.52	R 46,799.64	R 306,574.16	R 252,816.87	R 269,717.69
Distribution Costs	R 60,486.00	R 35,700.00	R 16,477.00	R 36,426.00	R 17,328.00	R 67,300.00	R 62,293.00	R 21,968.00	R 24,965.00	R 89,136.00	R 41,919.00	R 54,297.00
Other Income	R 60,914.00	R 212,742.00	R 191,193.00	R 85,117.00	R 97,514.00	R 66,367.00	R 29,718.00	R 247,969.00	R 136,793.00	R 98,235.00	R 14,961.00	R 168,286.00
Profit/Loss on Sale of Non-Current Assets	R 0.00	R 0.00	R 0.00	R 75,580.00	R 0.00	R 0.00	R 0.00	R 22,210.00	R 12,410.00	R 9,750.00	R 0.00	R 0.00
Profit/Loss on Exchange	R 530.00	R 358.00	R 361.00	R -3,111.00	R -900.00	R -466.00	R -2,694.00	R 172.00	R 965.00	R 996.00	R 636.00	R -436.00
Other Comprehensive Income	R 207,374.00	R 277,458.00	R 49,749.00	R 175,888.00	R 141,149.00	R 236,145.00	R 122,203.00	R 69,394.00	R 26,105.00	R 54,108.00	R 154,136.00	R 214,540.00
Dividends Received	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 175,500.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 125,500.00
Administrative Expense	R 10,500.00	R 10,500.00	R 10,500.00	R 10,500.00	R 10,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 17,500.00	R 22,000.00	R 22,000.00
Other Expense	R 19,351.00	R 130,044.00	R 167,176.00	R 71,003.00	R 171,866.00	R 122,408.00	R 84,409.00	R 163,787.00	R 146,964.00	R 100,419.00	R 143,488.00	R 188,480.00
Finance Cost	R 33,603.00	R 32,811.00	R 46,952.00	R 43,489.00	R 45,309.00	R 20,596.00	R 19,882.00	R 46,438.00	R 33,334.00	R 32,971.00	R 22,787.00	R 48,577.00
Tax Expense	R 187,996.04	R 413,279.95	R 586,054.83	R 28,729.15	R 154,575.39	R 626,429.81	R 220,781.35	R 87,162.25	R 278,496.72	R 123,862.48	R 580,892.61	R 439,362.93
Unallocated IS	R 4,889.00	R 6,205.00	R 2,492.00	R 4,163.00	R 7,492.00	R 4,444.00	R 8,131.00	R 9,168.00	R 3,606.00	R 5,040.00	R 6,523.00	R 3,523.00
Dividends Paid	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 35,175.00	R 0.00	R 0.00	R 0.00	R 0.00	R 0.00	R 22,100.00
Net Income(Loss)	R 76,821.77	R 218,514.33	R 74,892.84	R 134,403.86	R 27,634.59	R 134,976.02	R 95,381.50	R 64,887.23	R 84,717.35	R 97,390.64	R 93,834.48	R 116,157.38

Note that the **Period Numbers** in row 9 are listed as single numbers. All numbers should be in a double digit format, followed by the year e.g. 01 – 2014.

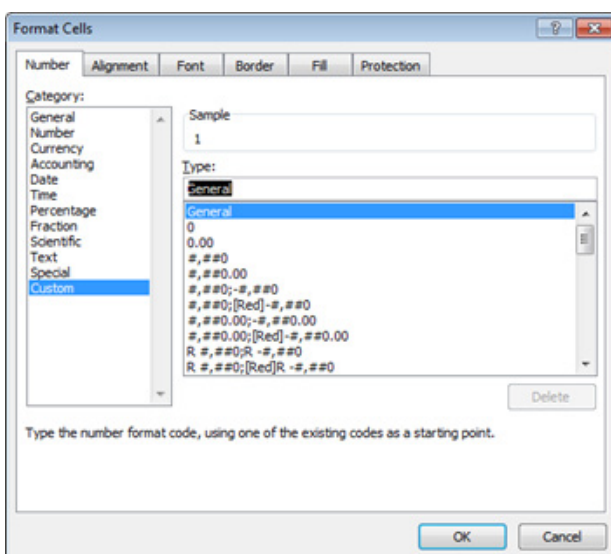
1. Select cells **E9 to P9**.

2. Press **CTRL + 1**. This opens the Format Cells window.

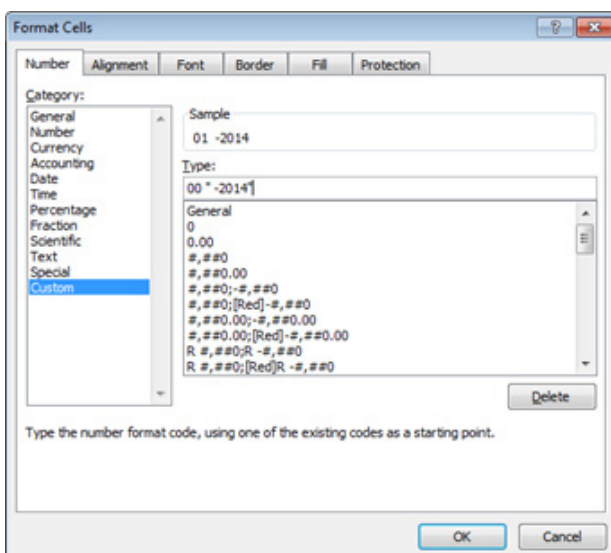
3. In the Category window, select **Custom**.



4. In the Type box, select **General**.



5. Type **00 "-2014"** then click **OK**.



30 Excel Tips & Tricks

Data Formatting

The period values have now been adjusted to a two-digit format to represent the period, and are appended with a “ – 2014” value.

Statement of Cash Flows

Company Name:

Demonstration Company

Current Year:

2014

	Period											
	01 -2014	02 -2014	03 -2014	04 -2014	05 -2014	06 -2014	07 -2014	08 -2014	09 -2014	10 -2014	11 -2014	12 -2014
Operating Activities												
Revenue	R 554,251.00	R 404,760.00	R 687,765.00	R 141,591.00	R 299,650.00	R 613,871.00	R 740,048.00	R 109,304.00	R 291,095.00	R 415,243.00	R 736,056.00	R 645,115.00

While the same result could have been achieved by using a concatenation formula, this method of using Custom Formats removes the need for it. As it’s a format that will be saved in this workbook, it can be applied to other cells very easily.

Conditional Formatting using custom Excel formulas

Conditional Formatting is an effective Microsoft® Excel® feature that allows you to highlight important information for example; the ability to find duplicate values within your spreadsheet. You can create your own rule by applying conditional formatting to cells or ranges of cells.

When you have selected the data you want to format, you can easily change the appearance of how your information is presented to help you easily analyze your data.

Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2010 and 2013

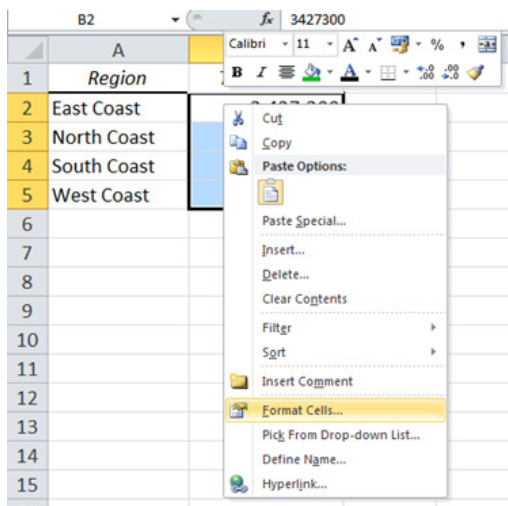
In this example, we have a number of cells containing values in excess of one million. We'll help you create a rule that will change the appearance of how the values are presented.

	A1	fx	Region
	A	B	
1	Region	Total Sales	
2	East Coast	3,427,300	
3	North Coast	8,724,600	
4	South Coast	5,911,100	
5	West Coast	6,753,150	

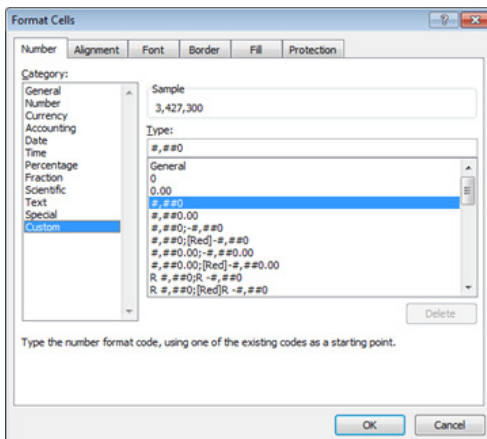
1. Open the Excel workbook and select cells **B2:B5**.

	B2	fx	3427300
	A	B	
1	Region	Total Sales	
2	East Coast	3,427,300	
3	North Coast	8,724,600	
4	South Coast	5,911,100	
5	West Coast	6,753,150	

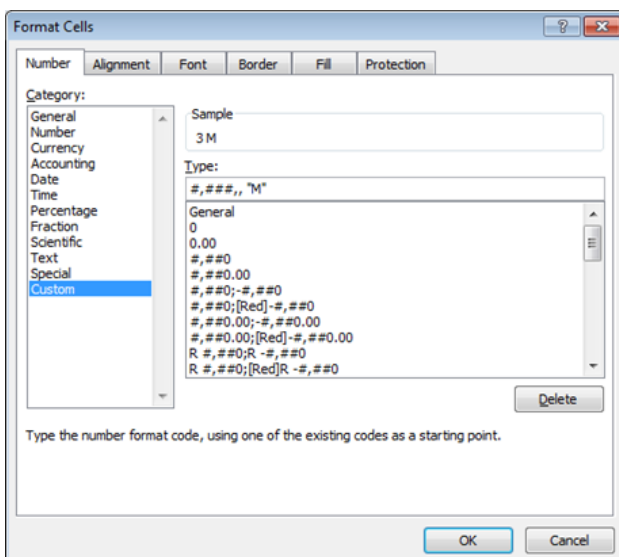
2. Right click on the selected cells and select **Format Cells** (alternatively, use the keyboard shortcut Ctrl + 1).



3. In the numbers tab, under the **Category** group, select **Custom**.



4. In the **Type** box, delete the current values and enter the following formula: **#,###,,"M"** and click **OK**.



5. The values in the cells are automatically rounded according to their value, along with the letter M to signify a million.

B2		f_x	3427300
	A	B	
1	Region	Total Sales	
2	East Coast	3 M	
3	North Coast	9 M	
4	South Coast	6 M	
5	West Coast	7 M	

Now that you have applied your own conditional formatting rule, you can customize your spreadsheets to help you visually analyse data, and identify patterns and trends.

How to determine whether you are over or under budget, using custom formats

Monitoring budgets can be quite stressful and may involve the use of formulas. Instead of complicated formulas, you can use custom number formats within Microsoft® Excel® to easily determine if you are over or under budget.

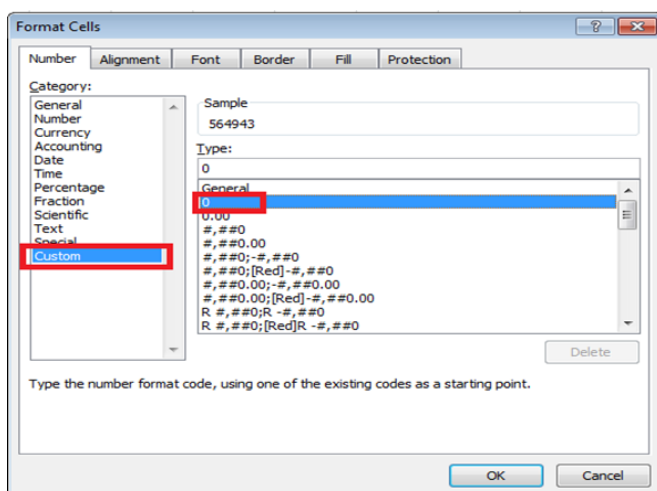
All it takes are a few steps and you can then monitor your budget. Follow the steps below as we explain how:

Download the [workbook](#) to practice

Applies to: Microsoft Excel 2010 and 2013

Actual vs Budget			
Month	Budget	Actual	Variance
January	2,355,872	1,790,929	564,943
February	2,654,031	2,827,606	-173,576
March	2,239,980	2,924,180	-684,200
April	3,350,156	3,867,270	-517,114
May	2,404,480	2,413,107	-8,627
June	2,307,708	2,220,000	87,708
July	2,950,529	3,102,678	-152,149
August	1,882,670	1,825,791	56,878
September	1,423,808	1,724,825	-301,017
October	1,210,847	1,100,000	110,847
November	997,886	750,000	247,886
December	3,233,965	3,200,000	33,965

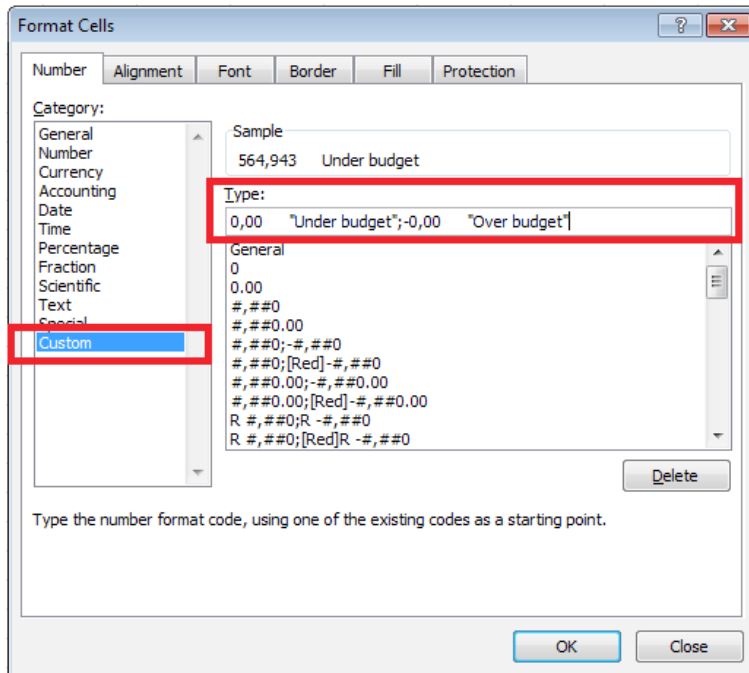
2. Select **Format Cells**, then select **Custom** from the **Category** menu.
3. In the **Type** field select **0**.



4. Type in the following: **0,000 "Under budget";-0,000 "Over budget"**
Then select **OK**.

NB: If the formula populates an error, use the following instead:

0,000 "Under budget";-0,000 "Over budget"



The values where the variance is positive have the words **Under budget** next to them. Where the variance is negative, **Over budget** is displayed. In that way it is easy to determine if a value is over or under budget.

Actual vs Budget				
Month	Budget	Actual	Variance	
January	2,355,872	1,790,929	564,943	Under budget
February	2,654,031	2,827,606	-173,576	Over budget
March	2,239,980	2,924,180	-684,200	Over budget
April	3,350,156	3,867,270	-517,114	Over budget
May	2,404,480	2,413,107	-8,627	Over budget
June	2,307,708	2,220,000	87,708	Under budget
July	2,950,529	3,102,678	-152,149	Over budget
August	1,882,670	1,825,791	56,878	Under budget
September	1,423,808	1,724,825	-301,017	Over budget
October	1,210,847	1,100,000	110,847	Under budget
November	997,886	750,000	247,886	Under budget
December	3,233,965	3,200,000	33,965	Under budget

How to quickly create a date format using a custom formula in Excel

By adding a custom formula to a range of cells, you can create a date, without having to manually format each cell (this also known as suffixing numbers with text strings). Let's say you have numbers in a spreadsheet and you wish to display them in a particular date format, you can apply a custom number formula to build a date range. Using this custom text string will help save you time and make your reports more reader friendly. In today's tip we'll show you how it can be done in four easy steps.

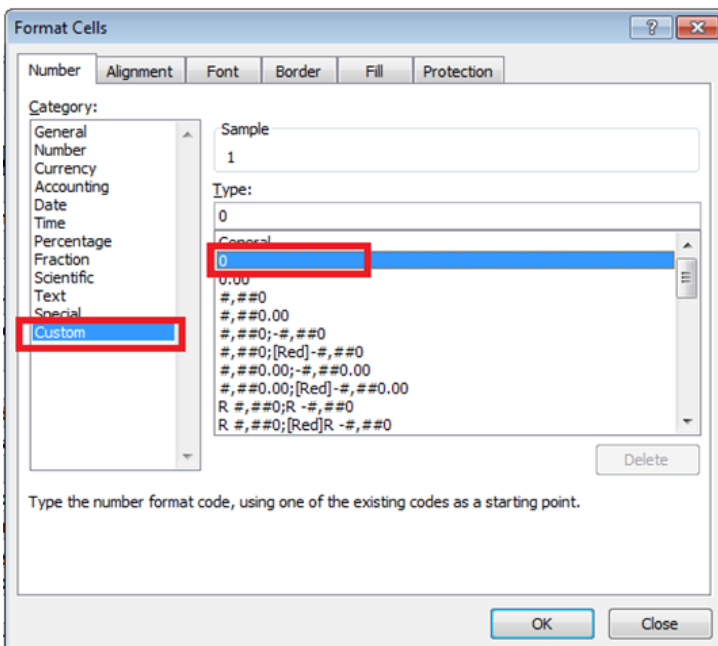
Download the [workbook](#) to practice

Applies to: Microsoft Excel 2010 and 2013

1. Select the data range **D4:D20**, and then right click.

Sales Person	Category Name	Product Name	Date	Quantity	Unit Price	Product Sales
Anderson. P	Confections	Maxilaku	1	60	7	432
Johnson. A	Grains/Cereals	Gnocchi di nonna Alice	2	21	14	292
Peters. K	Grains/Cereals	Tunnbröd	3	40	11	448
Bonders. P	Confections	Pavlova	4	2	15	29
Newson. L	Grains/Cereals	Singaporean Hokkien Fried Mee	5	5	15	76
Lavin. T	Seafood	Boston Crab Meat	6	10	14	144
Perks. M	Seafood	Inlagd Sill	7	15	29	432
Anderson. P	Beverages	Chai	8	30	17	504
Johnson. A	Dairy Products	Gudbrandsdalsost	9	24	14	346
Peters. K	Dairy Products	Queso Cabrales	10	20	7	146
Bonders. P	Beverages	Chai	11	35	10	364
Newson. L	Confections	Teatime Chocolate Biscuits	12	50	211	10540
Lavin. T	Condiments	Original Frankfurter grüne Soße	13	4	7	29
Perks. M	Beverages	Côte de Blaye	14	20	12	240
Anderson. P	Confections	Teatime Chocolate Biscuits	15	2	25	50
Johnson. A	Seafood	Röd Kaviar	16	14	10	140
Peters. K	Confections	Gumbär Gummibärchen	17	10	19	192

2. Select **Format Cells**.
3. Select **Custom** from the **Category** box, and then select **0** under **Type**.

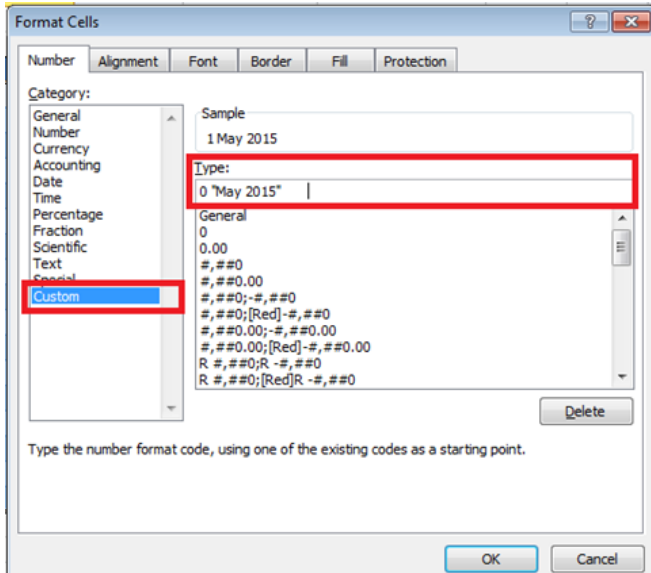


30 Excel Tips & Tricks

Data Formatting

4. Enter the following: **0 "May 2015"** under **Type**, then select **OK**.

NB: Should your Excel settings differ, remove the spacing as follows: **0" May 2015"**



Your selected data should now display the new date format as per below.

Sales Person	Category Name	Product Name	Date	Quantity	Unit Price	Product Sales
Anderson. P	Confections	Maxilaku	1 May 2015	60	7	432
Johnson. A	Grains/Cereals	Gnocchi di nonna Alice	2 May 2015	21	14	292
Peters. K	Grains/Cereals	Tunnbröd	3 May 2015	40	11	448
Bonders. P	Confections	Pavlova	4 May 2015	2	15	29
Newson. L	Grains/Cereals	Singaporean Hokkien Fried Mee	5 May 2015	5	15	76
Lavin. T	Seafood	Boston Crab Meat	6 May 2015	10	14	144
Perks. M	Seafood	Inlagd Sill	7 May 2015	15	29	432
Anderson. P	Beverages	Chai	8 May 2015	30	17	504
Johnson. A	Dairy Products	Gudbrandsdalsost	9 May 2015	24	14	346
Peters. K	Dairy Products	Queso Cabrales	10 May 2015	20	7	146
Bonders. P	Beverages	Chai	11 May 2015	35	10	364
Newson. L	Confections	Teatime Chocolate Biscuits	12 May 2015	50	211	10540
Lavin. T	Condiments	Original Frankfurter grüne Soße	13 May 2015	4	7	29
Perks. M	Beverages	Côte de Blaye	14 May 2015	20	12	240
Anderson. P	Confections	Teatime Chocolate Biscuits	15 May 2015	2	25	50
Johnson. A	Seafood	Röd Kaviar	16 May 2015	14	10	140
Peters. K	Confections	Gumbär Gummibärchen	17 May 2015	10	19	192

How to change the case of consistent text in Excel using Flash Fill

Manipulating data in Microsoft® Excel® may involve changing the text case from lower to upper case. Luckily, there is an easier way of doing this without the use of formulas.

A new feature in Excel 2013 and 2016 is the Flash Fill option. This can be used to change the case of consistent text. It can also be used to split and join (concatenate) consistent text. In this tip, we are going demonstrate how to use the Flash Fill option to convert names from lower to upper case.

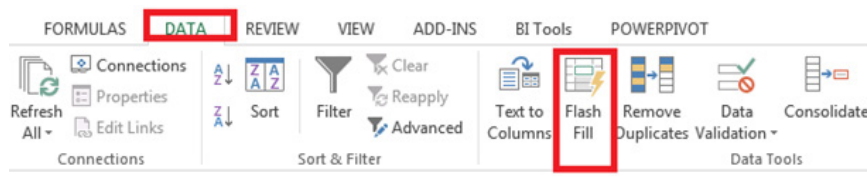
Download the [workbook](#) to practice

Applies to: Microsoft® Excel® 2013 and 2016

Select cell **B2** and enter **"JANUARY"**.

	A	B
1	BEFORE	AFTER
2	january	JANUARY
3	february	
4	march	
5	april	
6	may	
7	june	
8	july	
9	august	
10	september	
11	october	
12	november	
13	december	

2. Select the **Data** tab and then **Flash Fill**.



3. The months will all be converted to upper case.

	A	B
1	BEFORE	AFTER
2	january	JANUARY
3	february	FEBRUARY
4	march	MARCH
5	april	APRIL
6	may	MAY
7	june	JUNE
8	july	JULY
9	august	AUGUST
10	september	SEPTEMBER
11	october	OCTOBER
12	november	NOVEMBER
13	december	DECEMBER

The months have been quickly and easily converted to upper case without the use of complex formulas.

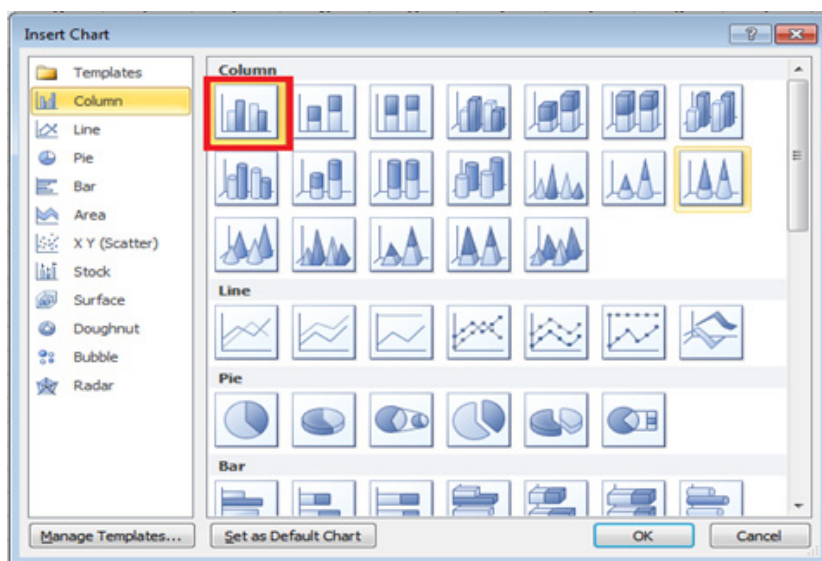
How to use a histogram to present frequency data

Ever heard of a histogram? A histogram is a column chart that shows frequency data. For example, if you're in sales and would like to analyze how frequently you sell certain quantities of goods, you can use a histogram.

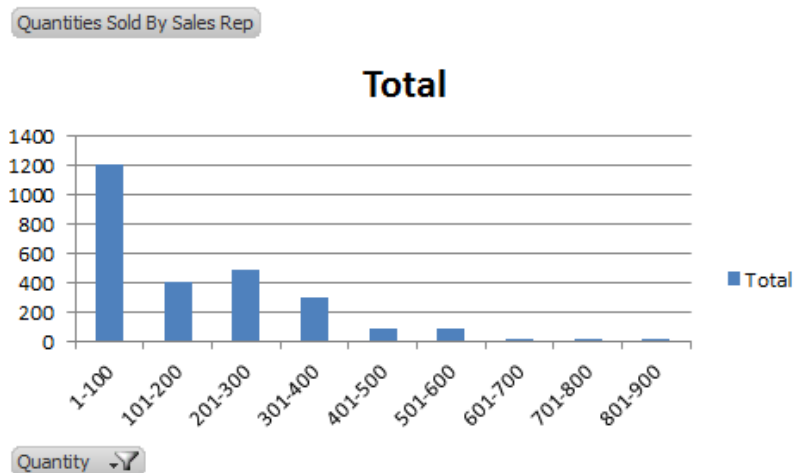
Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. Download the practice workbook.
2. Select any cell within the PivotTable.
3. Select the **Options**.
4. Click the **PivotChart**.



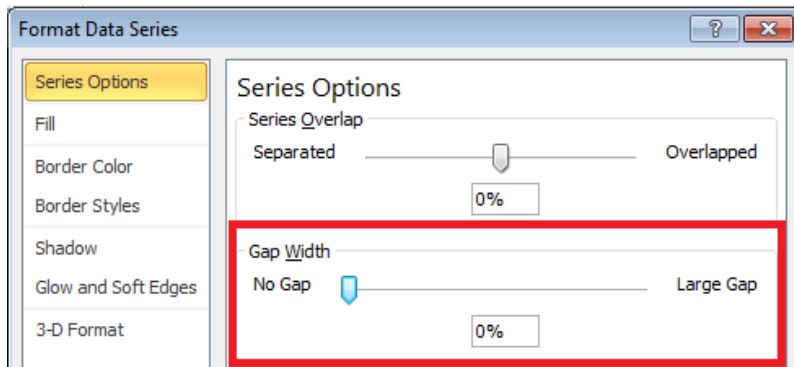
5. From the **Insert Chart** window, select the **Clustered Column**.
6. Click **OK**. The chart below will be inserted.



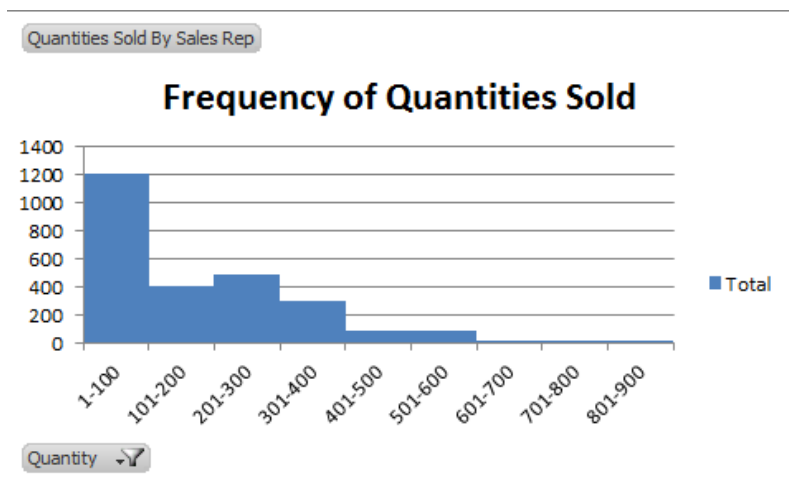
30 Excel Tips & Tricks

PivotTables & PivotCharts

- Right click on one of the data bars in the chart.
- Select the **Format Data Series** menu item.
- From the **Series Options** items, change the **Gap Width** to **0%**.



- The histogram below will be displayed. Edit the heading to **"Frequency of Quantities Sold"**.



As you can see with this example, customers often buy quantities between 1 and 100 of product x. Using this information, a Sales Manager can perhaps focus on selling quantities in that range. You can apply a histogram to other types of data, try it out!

30 Excel Tips & Tricks

PivotTables & PivotCharts

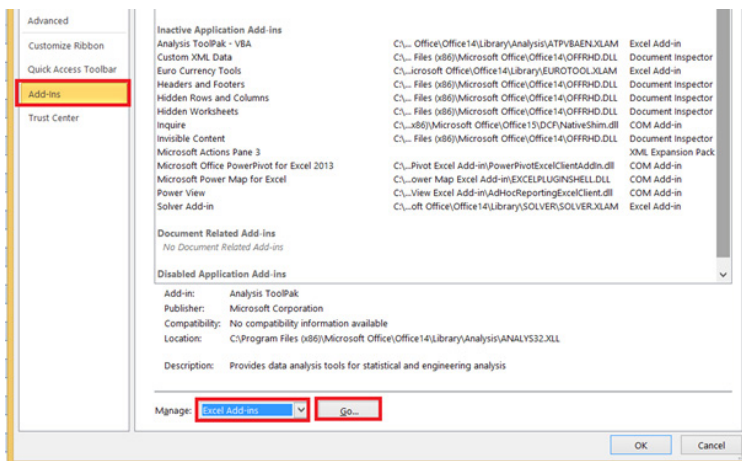
How to install the Analysis ToolPak and use a histogram to present frequency data

We showed you how to present data with PivotTable groupings and then add a column chart and convert that into a histogram. In this tip, we'll show you how to create a real histogram by installing the Analysis ToolPak which provides you with a host of data analysis tools.

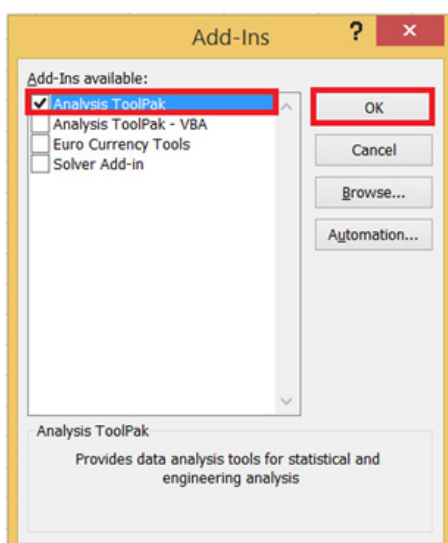
Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

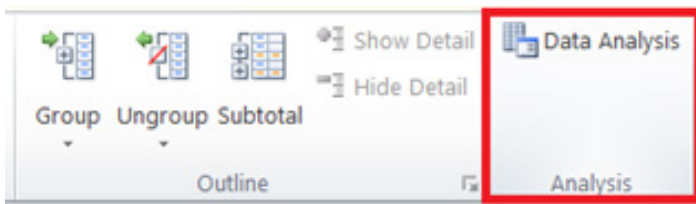
1. Download the practice workbook.
2. To Install the Analysis ToolPak:
 - a. Select **File** then **Options**.
 - b. Select **Add-ins** and next to Manage select **Excel add-ins**.



- c. Select **Go...**
 - d. Tick the check box next to **Analysis ToolPak** and select **OK**.

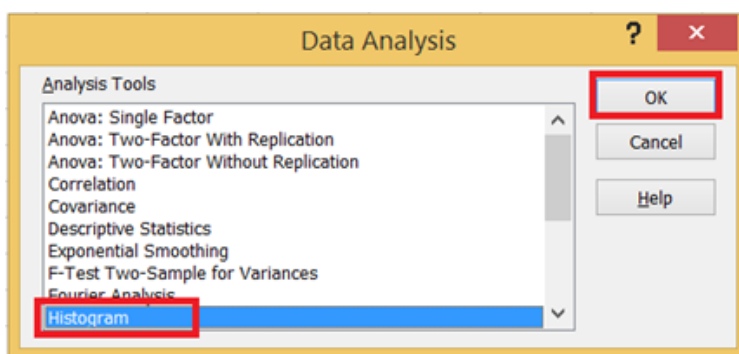


e. The **Analysis ToolPak** is now available under the **Data Tab** in the **Analysis group**.

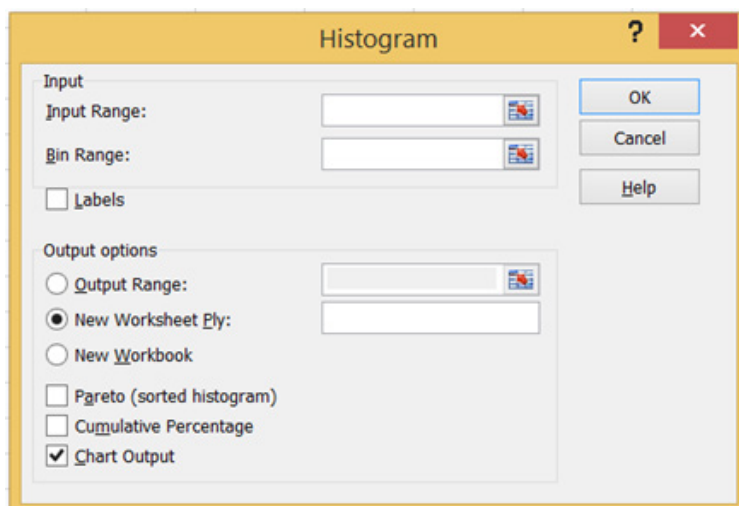


3. To create a histogram:

- a. Select **Data Analysis** under **Data Tab**.
- b. Select **Histogram**, then **OK**.



c. A dialogue box like the below will appear.

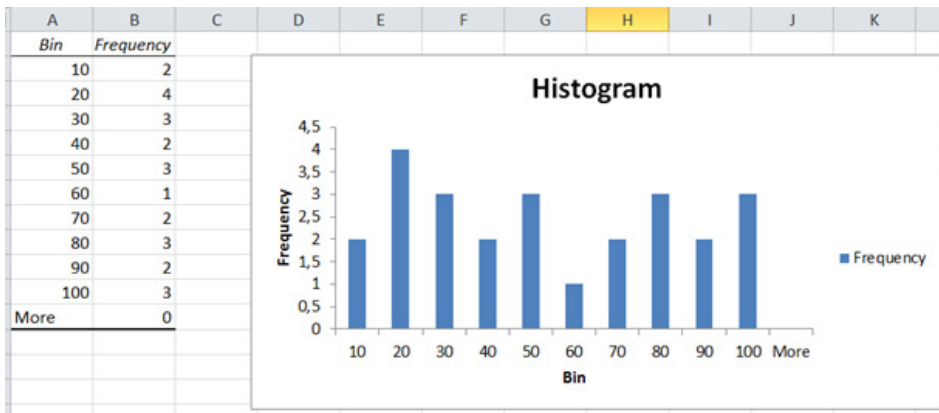


- d. Place the cursor in the **Input Range** text box. Input data is the data that you want to analyse by using the histogram tool.
- e. Select the data range **C4:C28**.
- f. Place the cursor in the **Bin Range** text box. Bin numbers are the numbers that represent the intervals that you want the histogram tool to use. For instance, how many times did clients buy quantities of 10, 20, 30, etc.
- g. Select the data range **D4:D13**.
- h. Ensure the **Chart Output** checkbox is ticked.
- i. Select **OK**.

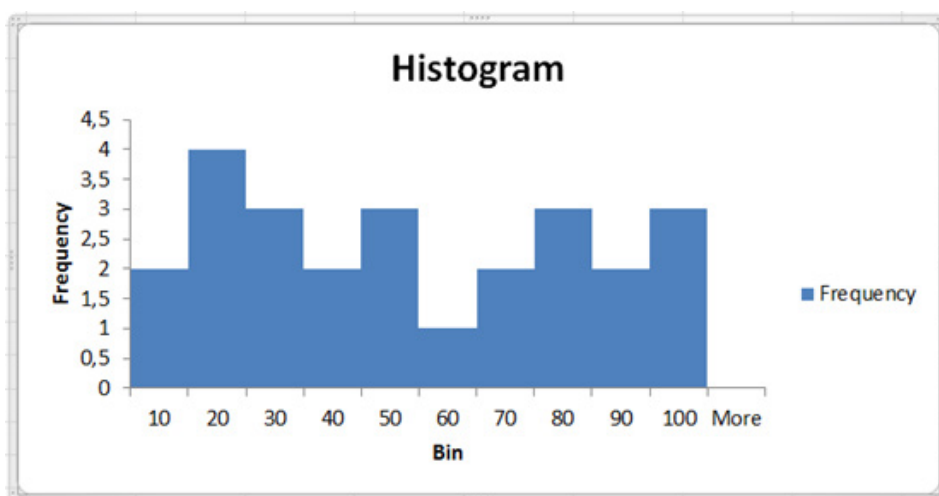
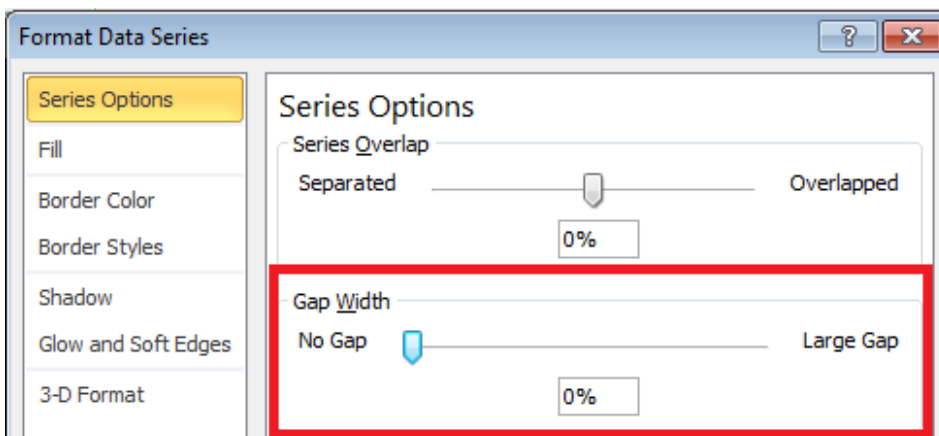
30 Excel Tips & Tricks

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j. A histogram and a data table will be displayed.



4. Right click on one of the data bars in the chart.
5. Select the **Format Data Series** menu item.
6. From the **Series Options** items, change the **Gap Width** to **0%**.



As you can see with this example, customers often buy quantities of 20 for product x, however quantities of 60 are unpopular. This could be something worth investigating. Once again, you can apply a histogram to other types of data – give it a try!

How to create a waterfall chart

A waterfall chart, which is a special type of a column chart, is normally used for understanding how an initial value is affected by a series of intermediate positive or negative values. Usually the initial and the final values are represented by whole columns, while the intermediate values are denoted by floating columns.

In this tip we show you how to create a waterfall chart.

Download the [dashboard template](#) to practice.

Applies to: Microsoft® Excel® 2010 and 2013

1. We start by setting up the data. Select the **Income and Expense Analysis** worksheet.

	A	B	C	D	E	F	G
1		Income and Expense Analysis for current Year					
2							
3		Cost Centre	Total		Running Total Expenses	Income	
4	2	Revenue	R 90,264,943			R 90,264,943	
5	4	Cost of Sales	R 18,052,989		R 72,211,954	R 18,052,989	
6	6	Gross Profit	R 72,211,954				R 72,211,954
7	8	Fixed and Semi-fixed Expense	R 33,005,709		R 39,206,245	R 33,005,709	
8	26	Variable Expenses	R 9,243,130		R 29,963,115	R 9,243,130	
9	36	Net Profit	R 29,963,115				R 29,963,115

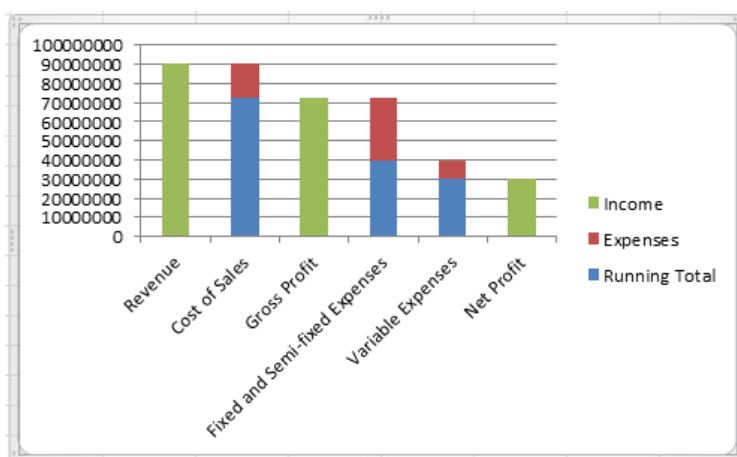
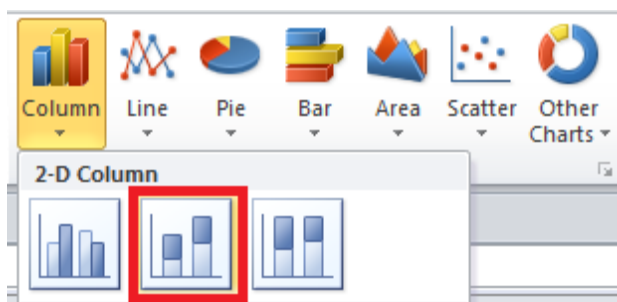
Note:

The value in E5 (Running Total) is Revenue (G4) – Cost of Sales (F5).

The Running Total in E7 equals Gross Profit (G6)- Fixed and Semi-fixed Expense (F7).

The value in E8 is the Net Profit and equals Running Total (E7) - variable Expenses (F8).

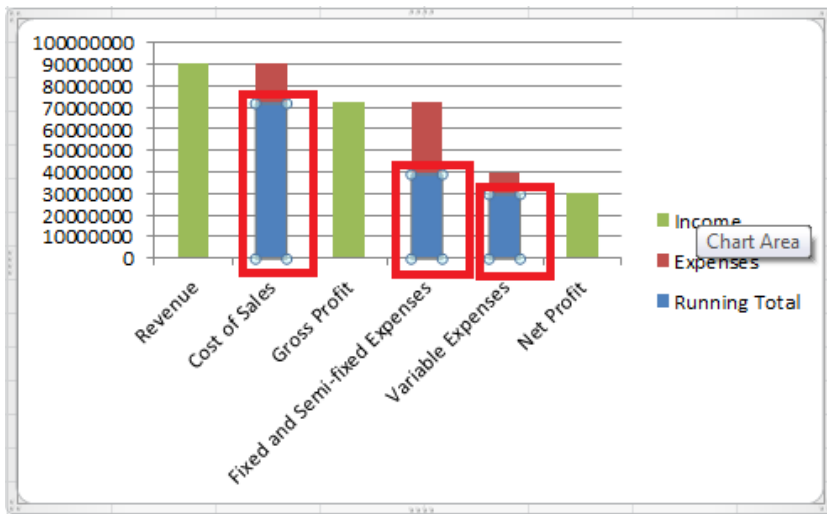
2. While holding down the Ctrl key, select cells **B3:B9** and cells **E3:G9**.
3. Select the **Insert** tab.
4. Select **Column** under the **Charts** group.
5. Select the **Stacked Column Chart**.



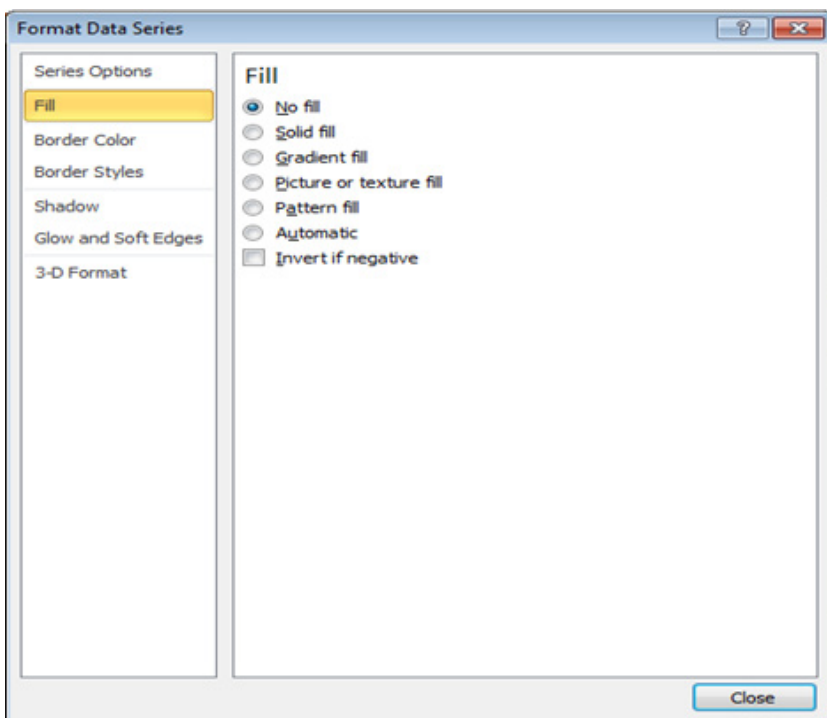
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- Right click on the **Running Totals** series on the chart.

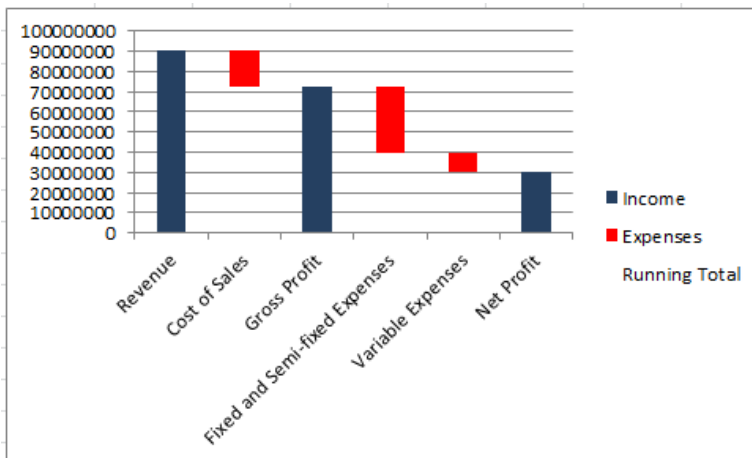


- Select the **Format Data Series** menu item.
- Select the **Fill** item.
- Select the **No fill** radio button.

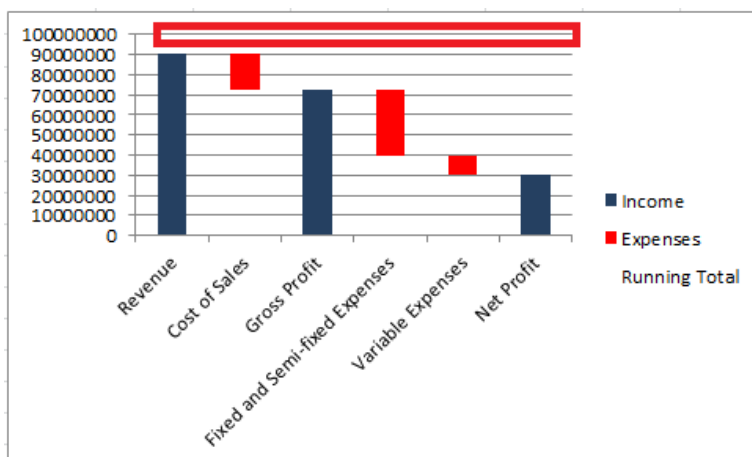


- Select the **Border Colour** item.
- Select the **No line** radio button.
- With the **Format Data Series** window still open, select the series on your chart that reflect Income.
- Select the **Fill** item.
- Select the **Solid fill** radio button.
- Select the colour that suits the theme of your dashboard.
- With the **Format Data Series** window still open, select the series on your chart that reflect Expenses.
- Select the **Fill** item.
- Select the **Solid fill** radio button.
- Select the **Red** item.

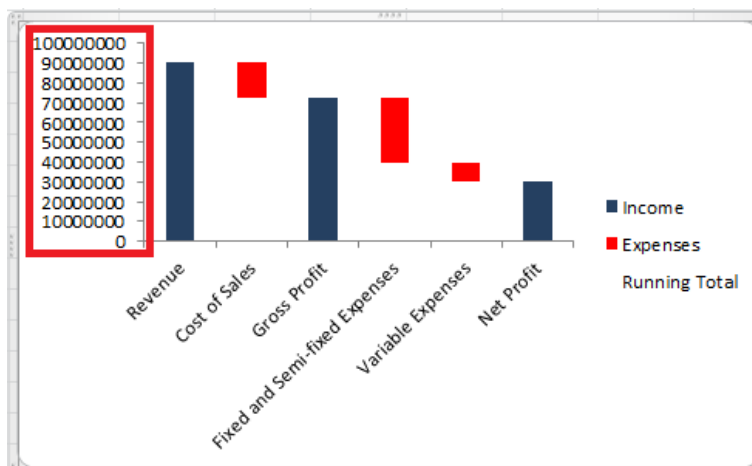
20. Click the **Close** button.



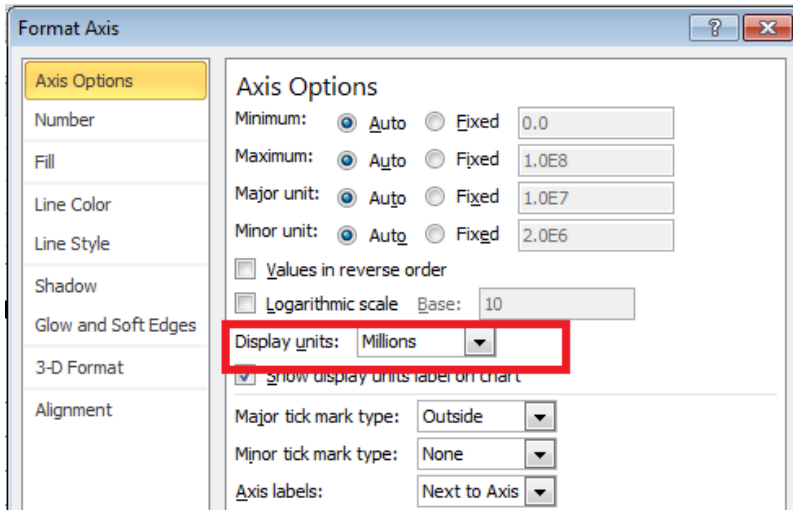
21. Right click on one of the **Horizontal Major Gridlines** and select **Delete**.



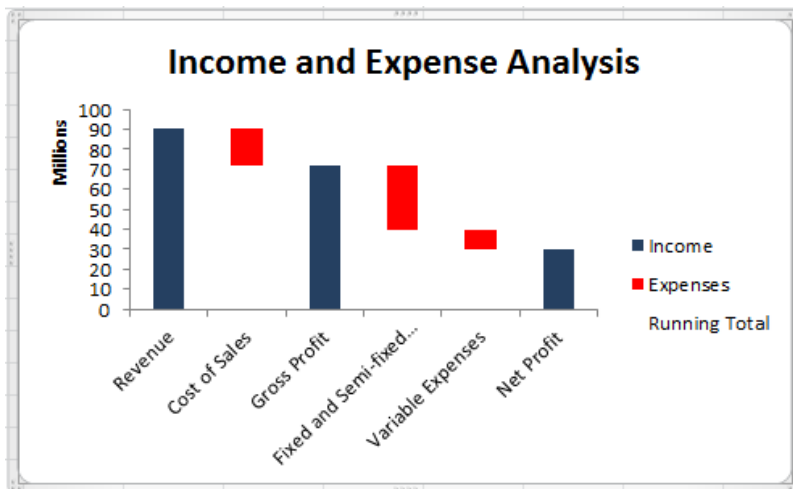
22. Right click the **Vertical Value Axis** and select **Format Axis**.



23. From the **Axis Options** menu, select the **Display Units** drop down.
24. Select **Millions**.



25. Select **Close**.
26. Select the **Waterfall Chart**.
27. Select the **Layout** tab then **Chart title**.
28. Select **above Chart**.
29. Enter **Income and Expense Analysis**.



The Revenue, Gross Profit and Net Profit are whole columns and show positive values. The Cost of Sales, Fixed and Semi-Fixed expenses and Variable expenses show negative values, and are depicted as floating columns.

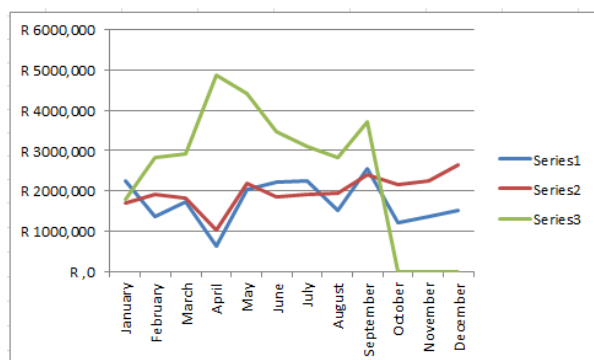
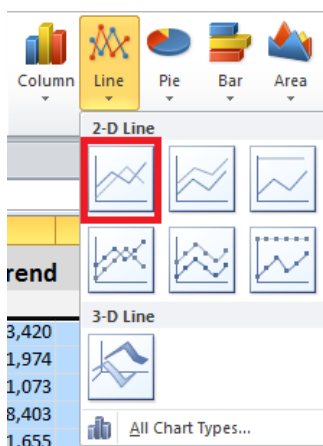
How to see trends over time using line charts

Charts are used in dashboards to provide graphical representations of data which give you at-a-glance views into key performance indicators. It's important to choose the right charts for what you want to see. If you want to see trends over time, use Line Charts. Using the financial dashboard template, we're going to display how the example company has performed for the past three years by showing the Net Profit Trend on a line chart.

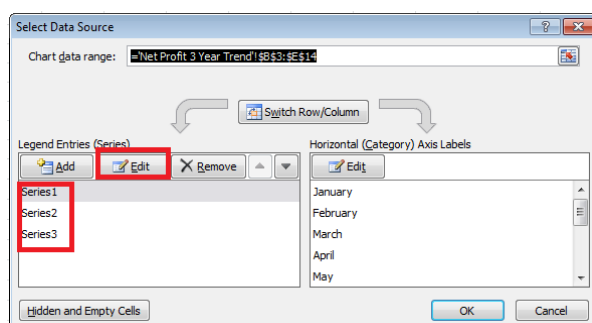
Download the [workbook](#) to practice

Applies to: Microsoft® Excel® 2010 and 2013

1. Select the **Net Profit 3 Year Trend** worksheet.
2. Select cells **B3:E14**.
3. Select the **Insert** tab.
4. Select the first **Line chart** from the **Charts** group.



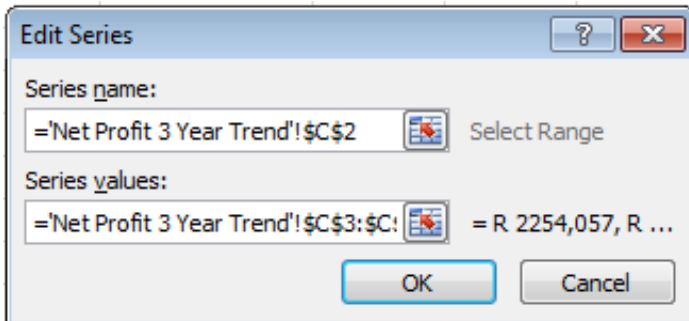
5. Select the **Line chart**.
6. Right click one of the **Series** on the chart.
7. Select the **Select Data** menu item.



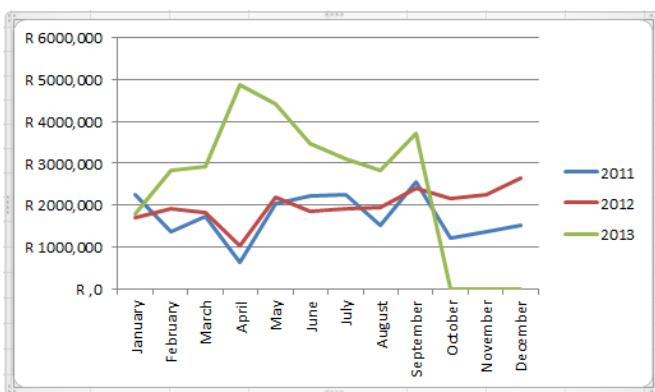
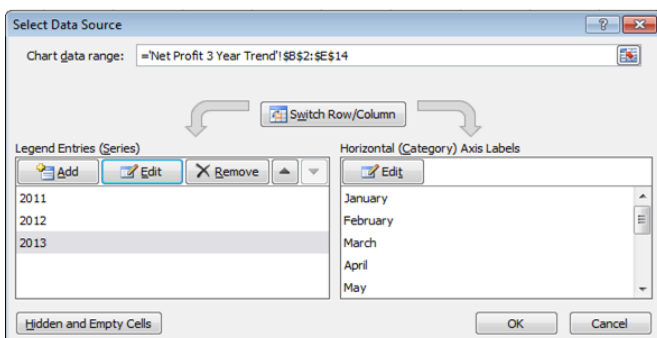
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8. From the **Select Data Source** window, select **Series1** and click the **Edit** button under **Legend Entry Series**.
9. Place your cursor in the **Series Name** box.

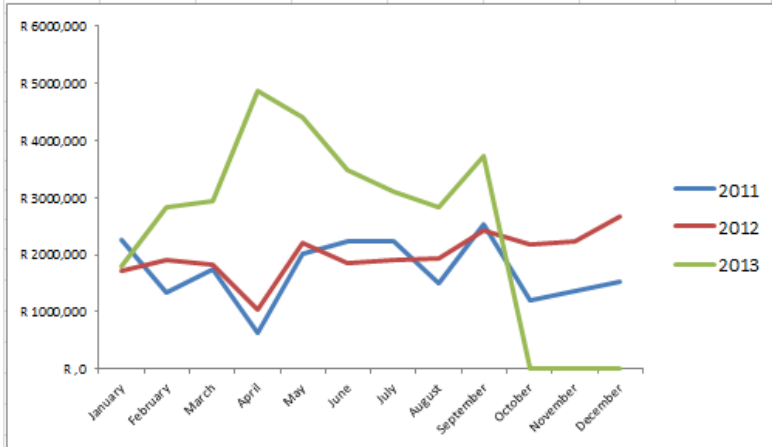


10. On the **Net Profit 3 Year Trend** worksheet, select cell **C2**. Click **OK**.
11. From the **Select Data Source** window, select **Series2** and click the **Edit** button under **Legend Entry Series**.
12. Place your cursor in the **Series Name** box.
13. On the **Net Profit 3 Year Trend** worksheet, select cell **D2**. Click **OK**.
14. From the **Select Data Source** window, select **Series3** and click the **Edit** button under **Legend Entry Series**.
15. Place your cursor in the **Series Name** box.
16. On the **Net Profit 3 Year Trend** worksheet, select cell **E2**. Click **OK**.
17. Click the **OK** button to exit from the **Select Data Source** window.

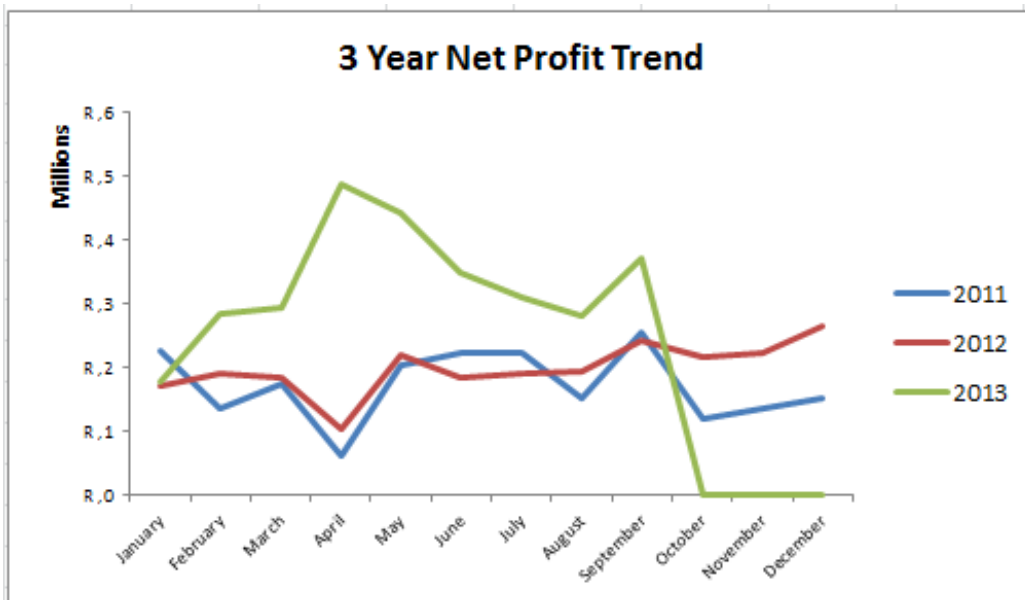


18. Right click on one of the **Horizontal Axis Major Gridlines** and select **Delete**.
19. Right click the **Horizontal Category Axis** and select the **Font** menu item.
20. Change the font size in the **Size** box to **7**. Click **OK**.

21. Right click the **Vertical Category Axis** and select the **Font** menu item.
22. Change the font size in the **Size** box to **7**. Click **OK**.



23. With your chart selected, select the **Layout** tab from the **Chart Tools** tab. Select **Chart Title**.
24. Select the **Above Chart** menu item.
25. Select the **Title** on the chart and place your cursor in the **Formula** bar.
26. Enter **=** and select **cell B1** and press **Enter** on your keyboard.
27. You can change the **Font size** and color from the **Home** tab under the **Font** group.
28. Right click the **Vertical Value Axis** and select **Format Axis**.
29. From the **Axis Options** menu, select the **Display Units** drop down.
30. Select **Millions**.



Based on the trends in the Line chart above, we can analyze the financial performance of the company for the years under review.

5 Easy steps to create a PivotChart in Excel

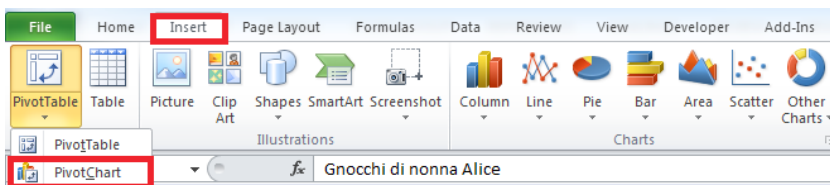
You can easily represent your data from a PivotTable into a PivotChart. PivotCharts allow you to graphically represent your data which can help you to easily see comparisons, patterns and trends. For example, a Sales Manager can use PivotCharts to analyse the performance of his or her sales staff.

A PivotTable is an interactive table that summarises large amounts of data, which you can analyse even further using a PivotChart. Instead of creating a regular chart from scratch each time, you can create a single PivotChart and view different parts of your data by changing your PivotTable.

You can create a Pivot Chart from scratch or from an existing PivotTable. In this week's tip we'll show you how to create a PivotChart from scratch.

Download the [workbook](#) to practice.

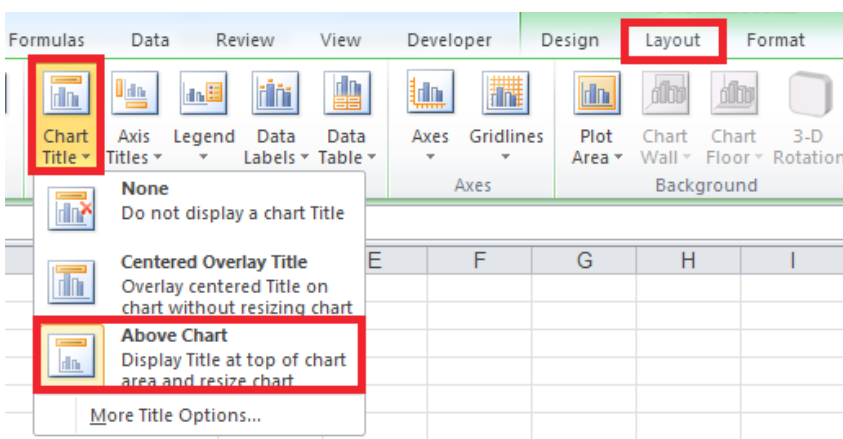
1. Select any cell within the data range.
2. Select the **Insert** tab then Pivot Chart. Then select **OK**.



3. Drag and place the **Sales Persons** field into the **axis field's** area (categories).
4. Drag and place the **Product Sales** fields into the **values** area.

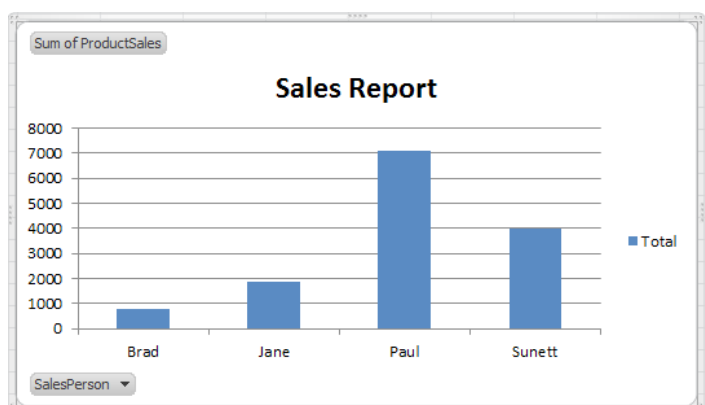
Filters	A field that you use to filter data by specific items. In the example, the Date page field displays data for all Dates. To display data for a single Date, you can click the arrow next to (All) and select the Date.
Values	A field from the underlying source data that provides values to compare or measure. These items will appear in the plot area.
Axis Fields	The items in the field provide the X-Axis labels at the bottom of the PivotChart.
Legend Fields	A category field provides the individual categories for which data points are charted. These items appear in the legend on the left of the PivotChart.

5. Add a title to the chart.
 - a. Select the chart.
 - b. Select the **layout** tab.
 - c. Select **chart title**.
 - d. Select **above chart**.
 - e. Enter the title, **Sales Report**.



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As you can see, you have now created an interactive PivotChart, using the data in your PivotTable.

A PivotChart report always has an associated PivotTable report. Both reports have fields that correspond to each other. When you change the position of a field in one report, the corresponding field in the other report also moves.

An easy way to link a Slicer to multiple PivotCharts in Excel

Slicers are used for filtering data and gives you a better understanding of your information. By using Slicers you can quickly drill down on a PivotTable. Slicers also indicate the current filtering state, which makes it easy to understand what exactly is shown in a filtered PivotTable report.

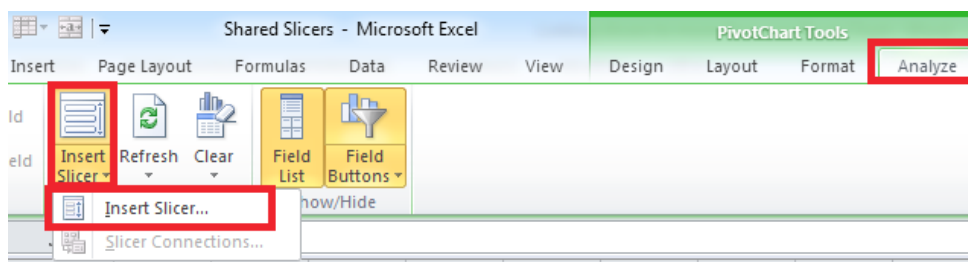
You can save time by linking Slicers to multiple PivotCharts, instead of inserting a separate Slicer for each PivotChart.

Any changes that you make to a shared Slicer is reflected immediately in all PivotCharts linked to the Slicer. In our example, we are going to share the sales person's Slicer by linking it to the sales-by-branch and sales-over-time PivotCharts.

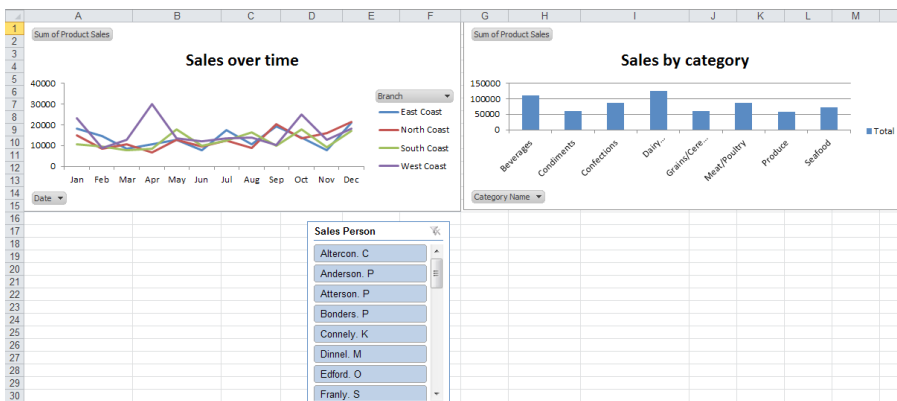
Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2010 and 2013

1. Select one of the PivotCharts.
2. Select the **Analyze** tab.



3. Select **Insert Slicer**.
4. From the list, select **sales person**. Then select **OK**.
5. **Right click** on the Slicer. Then select **PivotTable**.
6. Tick all the check boxes and select **OK**.
7. To analyze the performance of a sales person, select the name from the Slicer.
8. To make multiple selection: press the **CTRL** key and select the names from the Slicer list.
9. To clear the filter: click in the top right corner of the Slicer.



By linking one Slicer to multiple PivotCharts, you make your process more efficient and this helps save time, because the Slicer will not be duplicated. You can also easily select the data you want to be filtered and have an overall view of the operations of the business. Ultimately this will help you make better business decisions.

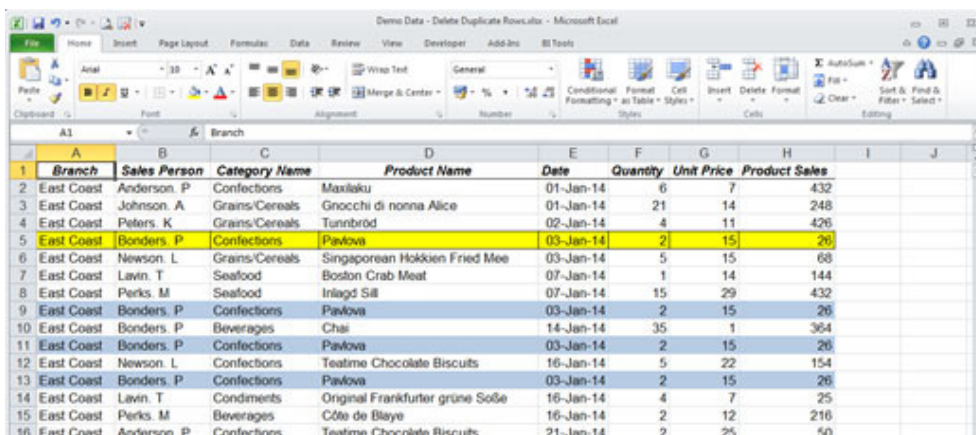
Search for and delete rows with duplicate data in two easy steps

If you have a worksheet with a lot of data and you want to ensure your data integrity, you need to make certain that there are no duplicates in your data. Trying to find and remove duplicates in your worksheet can be like trying to find a needle in a haystack. Fortunately, the Remove Duplicates dialog box makes it easy and quick for you, and it's even quicker when you use keyboard shortcuts.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2007, 2010 and 2013

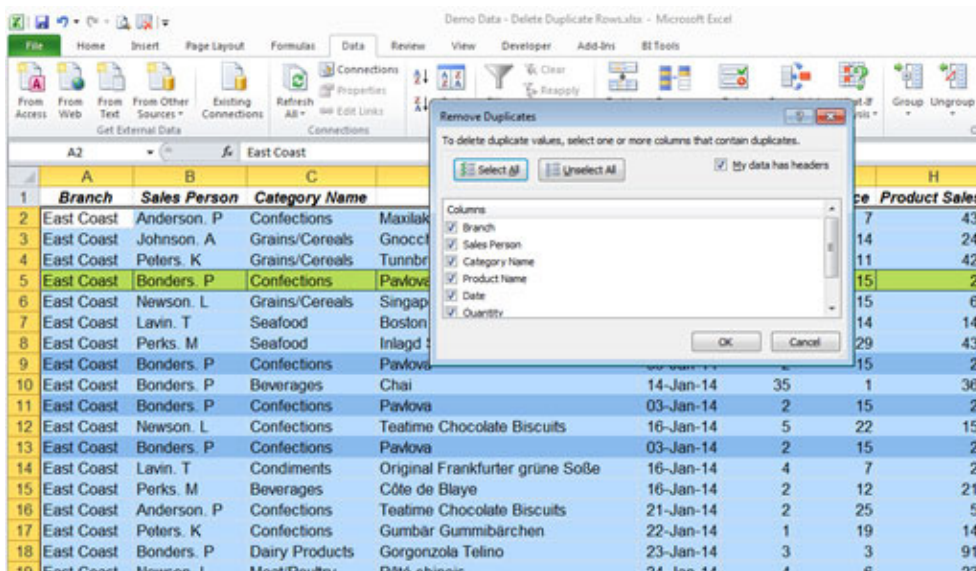
1. Open the demonstration workbook. Note that there are four rows highlighted. The yellow row is the original data row, and the three blue rows are duplicates of that row.



The screenshot shows an Excel worksheet titled 'Demo Data - Delete Duplicate Rows.xlsx'. The worksheet has columns A through J. Row 1 is the header row. Rows 2 through 16 are data rows. Row 2 is highlighted in yellow, and rows 3, 4, and 5 are highlighted in blue, indicating they are duplicates of row 2.

	A	B	C	D	E	F	G	H	I	J
1	Branch	Sales Person	Category Name	Product Name	Date	Quantity	Unit Price	Product Sales		
2	East Coast	Anderson, P	Confections	Maxilaku	01-Jan-14	6	7	432		
3	East Coast	Johnson, A	Grains/Cereals	Gnocchi di nonna Alice	01-Jan-14	21	14	248		
4	East Coast	Peters, K	Grains/Cereals	Tunnbröd	02-Jan-14	4	11	426		
5	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
6	East Coast	Newson, L	Grains/Cereals	Singaporean Hokkien Fried Mee	03-Jan-14	5	15	68		
7	East Coast	Lavin, T	Seafood	Boston Crab Meat	07-Jan-14	1	14	144		
8	East Coast	Perks, M	Seafood	Inlagd Sill	07-Jan-14	15	29	432		
9	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
10	East Coast	Bonders, P	Beverages	Chai	14-Jan-14	35	1	364		
11	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
12	East Coast	Newson, L	Confections	Teatime Chocolate Biscuits	16-Jan-14	5	22	154		
13	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
14	East Coast	Lavin, T	Condiments	Original Frankfurter grüne Soße	16-Jan-14	4	7	25		
15	East Coast	Perks, M	Beverages	Côte de Blaye	16-Jan-14	2	12	216		
16	East Coast	Anderson, P	Confections	Teatime Chocolate Biscuits	21-Jan-14	2	25	50		

2. Press **ALT + A, M**. This will launch the **Remove Duplicates** dialogue box.



The screenshot shows the same Excel worksheet as before, but with the 'Remove Duplicates' dialog box open. The dialog box has a 'Select All' button and a 'My data has headers' checkbox which is checked. The 'Columns' list on the right shows all columns (Branch, Sales Person, Category Name, Product Name, Date, Quantity) are selected.

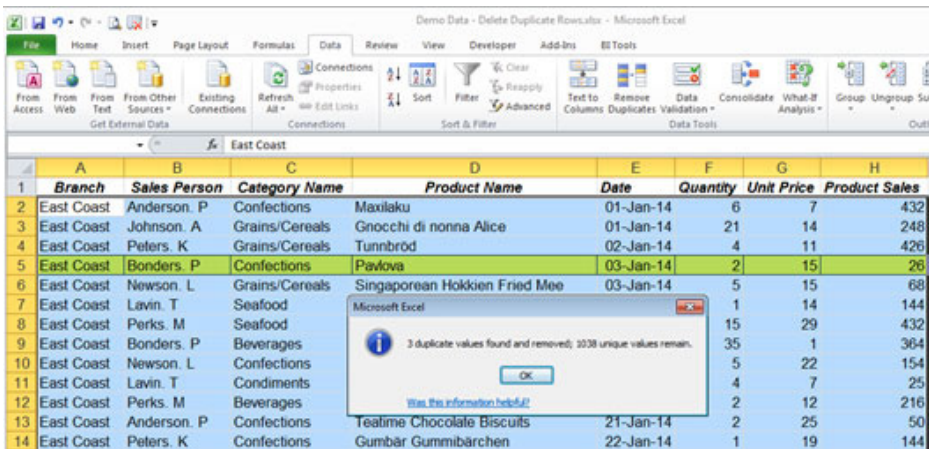
	A	B	C	D	E	F	G	H	I	J
1	Branch	Sales Person	Category Name	Product Name	Date	Quantity	Unit Price	Product Sales		
2	East Coast	Anderson, P	Confections	Maxilaku	01-Jan-14	6	7	432		
3	East Coast	Johnson, A	Grains/Cereals	Gnocchi di nonna Alice	01-Jan-14	21	14	248		
4	East Coast	Peters, K	Grains/Cereals	Tunnbröd	02-Jan-14	4	11	426		
5	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
6	East Coast	Newson, L	Grains/Cereals	Singaporean Hokkien Fried Mee	03-Jan-14	5	15	68		
7	East Coast	Lavin, T	Seafood	Boston Crab Meat	07-Jan-14	1	14	144		
8	East Coast	Perks, M	Seafood	Inlagd Sill	07-Jan-14	15	29	432		
9	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
10	East Coast	Bonders, P	Beverages	Chai	14-Jan-14	35	1	364		
11	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26		
12	East Coast	Newson, L	Confections	Teatime Chocolate Biscuits	16-Jan-14	5	22	154		
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15	East Coast	Perks, M	Beverages	Côte de Blaye	16-Jan-14	2	12	216		
16	East Coast	Anderson, P	Confections	Teatime Chocolate Biscuits	21-Jan-14	2	25	50		
17	East Coast	Peters, K	Confections	Gumbär Gummibärchen	22-Jan-14	1	19	144		
18	East Coast	Bonders, P	Dairy Products	Gorgonzola Telino	23-Jan-14	3	3	912		
19	East Coast	Newson, L	Meat/Poultry	PMM chinnik	24-Jan-14	4	6	296		

To determine which rows have duplicate data, Excel searches data in columns. And, by default, the Remove Duplicates dialogue box opens with all column headings checked/ticked. In this case, since we want to remove rows that have the exact same data, we will leave all column headings checked.

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Keyboard Shortcuts

- Press **ENTER** to remove the duplicate rows.



The screenshot shows the Microsoft Excel interface with a data table. The table has columns: Branch, Sales Person, Category Name, Product Name, Date, Quantity, Unit Price, and Product Sales. The data is filtered by 'East Coast'. A dialog box is displayed in the center, stating: '3 duplicate values found and removed; 2038 unique values remain.' The dialog box also includes a link to 'View this information help!'. The table data is as follows:

	A	B	C	D	E	F	G	H
	Branch	Sales Person	Category Name	Product Name	Date	Quantity	Unit Price	Product Sales
2	East Coast	Anderson, P	Confections	Maxilaku	01-Jan-14	6	7	432
3	East Coast	Johnson, A	Grains/Cereals	Gnocchi di nonna Alice	01-Jan-14	21	14	248
4	East Coast	Peters, K	Grains/Cereals	Tunmbrod	02-Jan-14	4	11	426
5	East Coast	Bonders, P	Confections	Pavlova	03-Jan-14	2	15	26
6	East Coast	Newsom, L	Grains/Cereals	Singaporean Hokkien Fried Mee	03-Jan-14	5	15	68
7	East Coast	Lavin, T	Seafood			1	14	144
8	East Coast	Perks, M	Seafood			15	29	432
9	East Coast	Bonders, P	Beverages			35	1	364
10	East Coast	Newsom, L	Confections			5	22	154
11	East Coast	Lavin, T	Condiments			4	7	25
12	East Coast	Perks, M	Beverages			2	12	216
13	East Coast	Anderson, P	Confections	Teatime Chocolate Biscuits	21-Jan-14	2	25	50
14	East Coast	Peters, K	Confections	Gumbar Gummibarchen	22-Jan-14	1	19	144

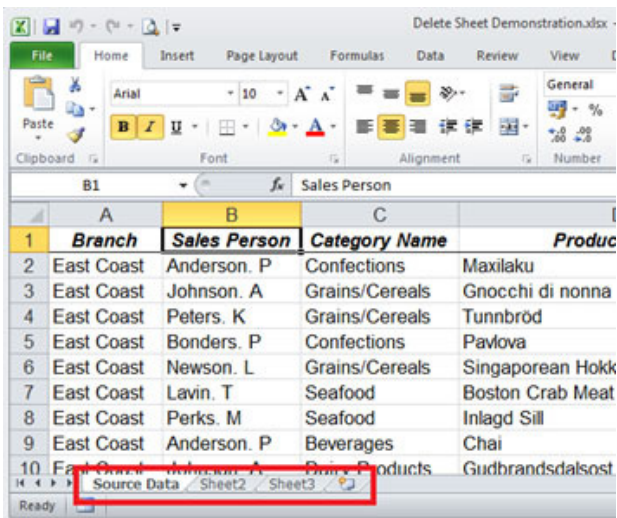
How to delete a worksheet quicker using keyboard shortcuts

To delete a worksheet in a Microsoft® Excel® workbook, you would normally right-click on the worksheet tab and select Delete. However, to save you a bit of time, you can do it quicker using a keyboard shortcut combination that will execute the same command.

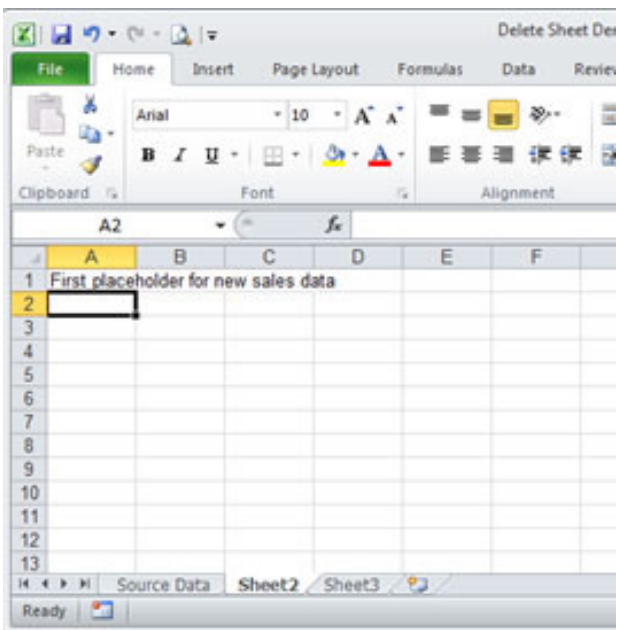
Download the [workbook](#) to practice.

Applies to: Microsoft Excel 2003, 2007, 2010 and 2013

1. Open the workbook. There are three sheets, however we wish to delete the second and third sheets (Sheet2 and Sheet3 respectively).



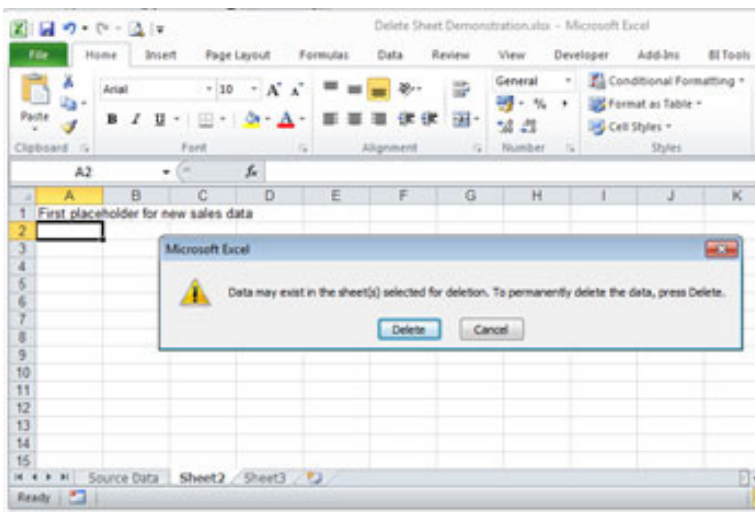
2. Select **Sheet2**.



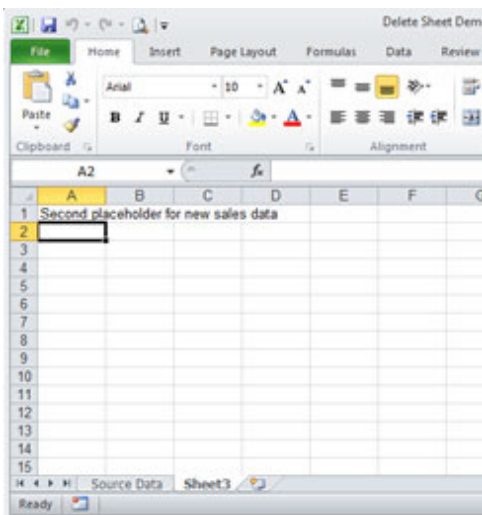
30 Excel Tips & Tricks

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3. Press **ALT + E**, then the **L** key.



4. Select **Delete** in the **Confirm Deletion** window. The sheet will now be deleted.



5. Sheet3 will now be selected. Press **F4** to repeat your last command, and you will be able to delete this sheet as well. The F4 keyboard shortcut repeats the last command. This shortcut will also apply if you chose to use the right-click method deletion method.

Additional Note: Microsoft Excel 2010 and 2013 have a new keyboard shortcut for deleting a sheet – **Alt + H, D, S**. However, they will still recognise the original version, which involves one less keystroke.

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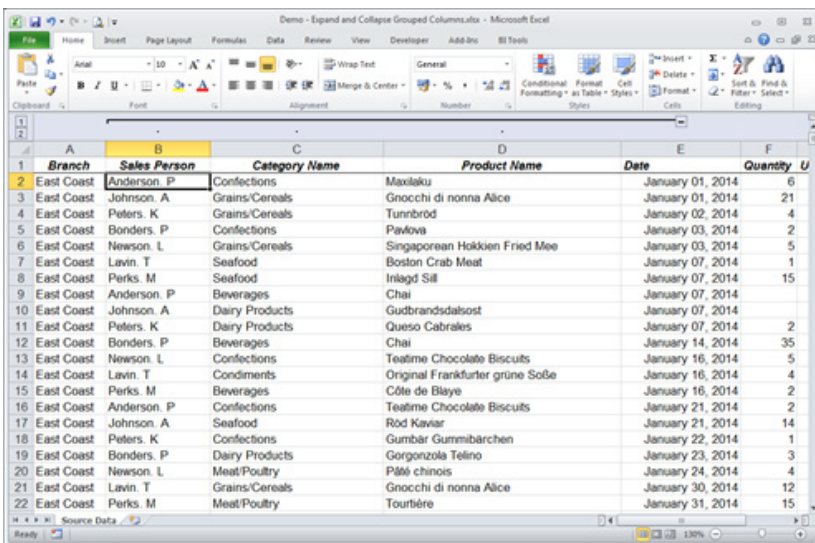
How to expand and collapse grouped columns using keyboard shortcuts

Grouped columns and rows (sometimes called Outline Data) are an alternative for hiding and showing data without using the Hide and Unhide function. Both options are great for organizing and de-cluttering worksheets which have a lot of data on display. Did you know that you can expand and collapse grouped columns using keyboard shortcuts? Follow the steps below to see how:

Download the [workbook](#) to practice.

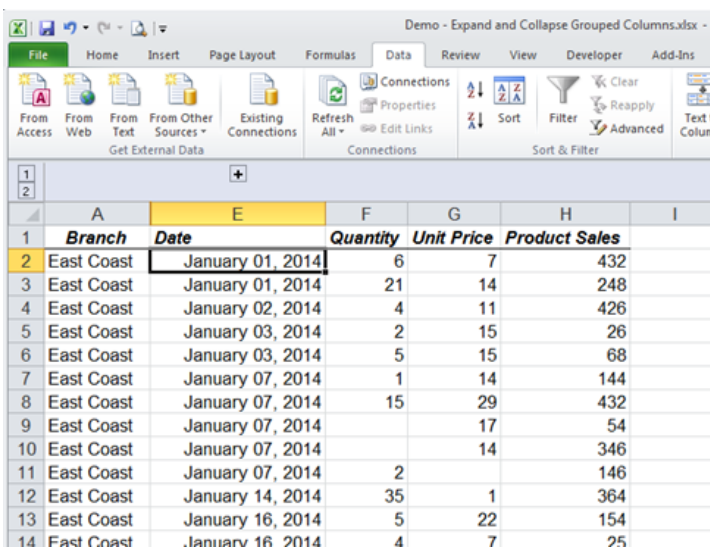
Applies to: Microsoft® Excel® 2010 and 2013

1. Open the exercise workbook. You will see that three columns (B, C and D) are grouped together.



Branch	Sales Person	Category Name	Product Name	Date	Quantity
East Coast	Anderson, P.	Confections	Maxilaku	January 01, 2014	6
East Coast	Johnson, A.	Grains/Cereals	Gnocchi di nonna Alice	January 01, 2014	21
East Coast	Peters, K.	Grains/Cereals	Tunnbröd	January 02, 2014	4
East Coast	Bonders, P.	Confections	Pavlova	January 03, 2014	2
East Coast	Newson, L.	Grains/Cereals	Singaporean Hokkien Fried Mee	January 03, 2014	5
East Coast	Lavin, T.	Seafood	Boston Crab Meat	January 07, 2014	1
East Coast	Perks, M.	Seafood	Inlagd Sill	January 07, 2014	15
East Coast	Anderson, P.	Beverages	Chai	January 07, 2014	
East Coast	Johnson, A.	Dairy Products	Gudbrandsdalsost	January 07, 2014	
East Coast	Peters, K.	Dairy Products	Queso Cabrales	January 07, 2014	2
East Coast	Bonders, P.	Beverages	Chai	January 14, 2014	35
East Coast	Newson, L.	Confections	Teatime Chocolate Biscuits	January 16, 2014	5
East Coast	Lavin, T.	Condiments	Original Frankfurter grüne Soße	January 16, 2014	4
East Coast	Perks, M.	Beverages	Côte de Blaye	January 16, 2014	2
East Coast	Anderson, P.	Confections	Teatime Chocolate Biscuits	January 21, 2014	2
East Coast	Johnson, A.	Seafood	Röd Kaviar	January 21, 2014	14
East Coast	Peters, K.	Confections	Gumbär Gummibärchen	January 22, 2014	1
East Coast	Bonders, P.	Dairy Products	Gorgonzola Telino	January 23, 2014	3
East Coast	Newson, L.	Meat/Poultry	Pâté chinois	January 24, 2014	4
East Coast	Lavin, T.	Grains/Cereals	Gnocchi di nonna Alice	January 30, 2014	12
East Coast	Perks, M.	Meat/Poultry	Tourtière	January 31, 2014	15

2. Select any cell in those three columns - then press **ALT, A, H**.



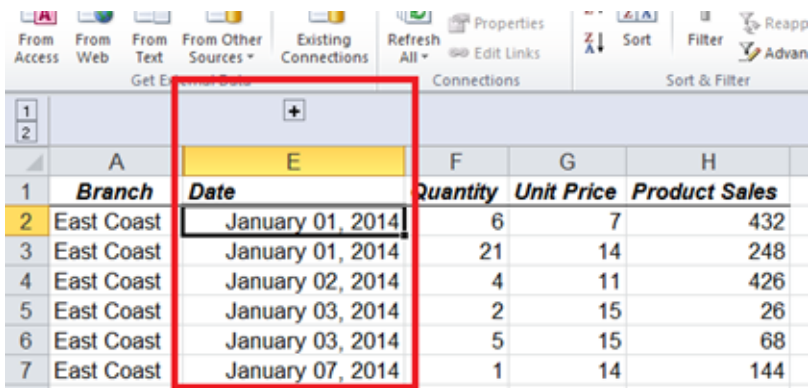
Branch	Date	Quantity	Unit Price	Product Sales
East Coast	January 01, 2014	6	7	432
East Coast	January 01, 2014	21	14	248
East Coast	January 02, 2014	4	11	426
East Coast	January 03, 2014	2	15	26
East Coast	January 03, 2014	5	15	68
East Coast	January 07, 2014	1	14	144
East Coast	January 07, 2014	15	29	432
East Coast	January 07, 2014		17	54
East Coast	January 07, 2014		14	346
East Coast	January 07, 2014	2		146
East Coast	January 14, 2014	35	1	364
East Coast	January 16, 2014	5	22	154
East Coast	January 16, 2014	4	7	25

The grouped rows are now in a collapsed view.

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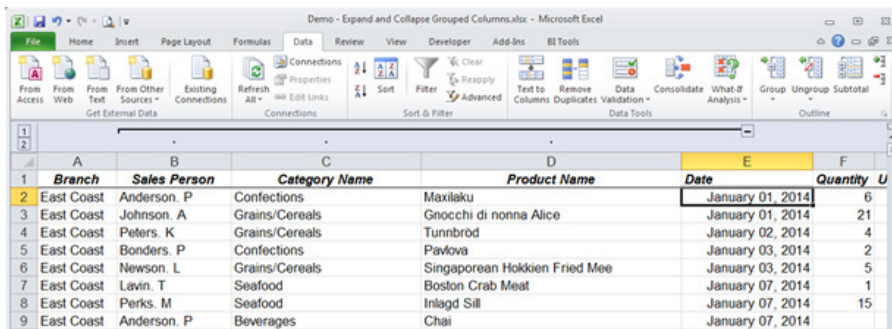
3. In order to expand the selection, you must select a cell in the same column as the group symbol (in this case, column E).



The screenshot shows the Excel ribbon with the 'Data' tab selected. The 'Connections' group is active, showing options like 'From Access', 'From Web', 'From Text', 'From Other Sources', 'Existing Connections', 'Refresh All', 'Properties', 'Edit Links', 'Sort', 'Filter', and 'Advanced'. Below the ribbon, a table is displayed with columns A through H. Column E is highlighted in yellow and contains a group symbol (+). A red box is drawn around the group symbol in column E, indicating the selection point for expanding the table.

	A	E	F	G	H
1	Branch	Date	Quantity	Unit Price	Product Sales
2	East Coast	January 01, 2014	6	7	432
3	East Coast	January 01, 2014	21	14	248
4	East Coast	January 02, 2014	4	11	426
5	East Coast	January 03, 2014	2	15	26
6	East Coast	January 03, 2014	5	15	68
7	East Coast	January 07, 2014	1	14	144

4. Press **ALT, A, J**.



The screenshot shows the Excel ribbon with the 'Data' tab selected. The 'Connections' group is active, showing options like 'From Access', 'From Web', 'From Text', 'From Other Sources', 'Existing Connections', 'Refresh All', 'Properties', 'Edit Links', 'Sort', 'Filter', and 'Advanced'. Below the ribbon, a table is displayed with columns A through F. The table is expanded, showing all columns: Branch, Sales Person, Category Name, Product Name, Date, and Quantity. The 'Date' column is highlighted in yellow.

	A	B	C	D	E	F
1	Branch	Sales Person	Category Name	Product Name	Date	Quantity
2	East Coast	Anderson, P	Confections	Maxilaku	January 01, 2014	6
3	East Coast	Johnson, A	Grains/Cereals	Gnocchi di nonna Alice	January 01, 2014	21
4	East Coast	Peters, K	Grains/Cereals	Tunnbrød	January 02, 2014	4
5	East Coast	Bonders, P	Confections	Pavlova	January 03, 2014	2
6	East Coast	Newson, L	Grains/Cereals	Singaporean Hokkien Fried Mee	January 03, 2014	5
7	East Coast	Lavin, T	Seafood	Boston Crab Meat	January 07, 2014	1
8	East Coast	Perks, M	Seafood	Inlagd Sill	January 07, 2014	15
9	East Coast	Anderson, P	Beverages	Chai	January 07, 2014	

The grouped columns are now expanded.

How to quickly format cells using keyboard shortcuts

There are so many keyboard shortcuts available for performing very common tasks, which can save you a lot of time. For example, there are keyboard shortcuts available for formatting cells. In some instances, there is more than one shortcut combination that can be used to perform one function, like these:

Ctrl + 2 and Ctrl + B: Apply or remove bold formatting.

Ctrl + 3 and Ctrl + I: Apply or remove italic formatting.

Ctrl + 4 and Ctrl + U: Apply or remove underline formatting.

Another useful combination is the strikethrough keyboard shortcut, **Ctrl + 5**, helps identify items that have been completed in a list. In the steps that follow, we show you how to use all of the above keyboard shortcuts.

Download the [workbook](#) to practice.

Applies to: Microsoft® Excel® 2007, 2010 and 2013

1. Highlight cells **B1:C1**.

	B1		To Do:
	A	B	C
1		To Do:	Due By:
2		Contact new client	01/12/14
3		Email boss regarding sales target	20/12/14
4		Pick up milk	02/12/14
5		Solve world hunger	Yesterday
6			

2. Press **Ctrl + 2 (or Ctrl + B)** to bold the cells, then **Ctrl + 4 (or Ctrl + U)** to underline the cells.

The screenshot shows the Excel ribbon with the 'Font' group. The 'B' (Bold), 'I' (Italic), and 'U' (Underline) buttons are highlighted with a red box. Below the ribbon, the 'To Do' table is shown with the text in cells B1 and C1 now bold and underlined.

	B1		To Do:
	A	B	C
1		<u>To Do:</u>	<u>Due By:</u>
2		Contact new client	01/12/14
3		Email boss regarding sales target	20/12/14
4		Pick up milk	02/12/14
5		Solve world hunger	Yesterday
6			

3. Highlight cells **B2:B4**.

B2			f _x	Contact new client
	A	B	C	
1		To Do:	Due By:	
2		Contact new client	01/12/14	
3		Email boss regarding sales target	20/12/14	
4		Pick up milk	02/12/14	
5		Solve world hunger	Yesterday	
6				

4. Press **Ctrl + 5** to apply strikethrough formatting to all cells.

B2			f _x	Contact new client
	A	B	C	
1		To Do:	Due By:	
2		Contact new client	01/12/14	
3		Email boss regarding sales target	20/12/14	
4		Pick up milk	02/12/14	
5		Solve world hunger	Yesterday	
6				



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- For online training, visit the [Sage Intelligence Academy](#).

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