

# BetterSolutions.com

Microsoft Office Tutorials and Consultancy

## April 2014 - Letter from the Editor

Welcome to the eleventh edition of the BetterSolutions.com newsletter. In this issue we are going to discuss Office Mobile, Office Online, Office 365, SUBTOTAL function, YIELD function and Macro Security. This issue was originally going to be dedicated to “What’s Changed in 2010/2013” but there have been so many changes we decided to put this information straight onto the website instead. Each section now includes a page called “Version Changes” which discusses what has changed in the context of that particular section. For example to see what changes have been made in relation to Excel Charts please refer to the (Excel > Charts > Version Changes) page. Every section also contains a page dedicated to Office Online articles. For Excel Functions this would be (Excel > Functions > Office Online). These online articles can no longer be accessed directly from the Microsoft website. The only other way to browse these pages is by pressing F1 from within your Office application. For the last couple of years we have been focusing on scalability and improving our infrastructure. Office 2013 offers even more features and combining this with Windows Phone and Office 365 we are very well positioned to give you all the support you need to be more productive.

### King of Spreadsheets

Excel is the undisputed king of spreadsheets. The functionality is incredible, the integration is phenomenal and the customisation is endless. These spreadsheets can be used on any device and have a file format that is XML based and completely open. Our website demonstrates our commitment to Microsoft Office and has been designed to help you get the most from this application. If you want to be more productive, but don’t know where to go, maybe you should, visit our website:

<http://bettersolutions.com/excel.aspx>

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Tutorials - Microsoft Excel																										
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Add-ins	Named Ranges																									
Analysis ToolPak	Objects																									
Array Formulas	Options																									
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Cells & Ranges	Printing																									
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Data Validation	SharePoint																									
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Dates & Times	Tables																									
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Help	XML																									
Importing & Exporting	Visual Basic																									
Macros	Visual Basic Enumerations																									

### support@bettersolutions.com

This email address is the one you should use when you have any problems or questions with Microsoft Office and you want some FREE help and advice. Sending us your questions will not only mean that you get a reply immediately but will also allow us to publish the answer or solution in the next issue which will no doubt help other people as well. We spend a lot of time checking and testing the information to ensure that it is accurate but if you do spot any mistakes or anything that is not accurate then please tell us. We are always looking for ways to improve our products and services and always welcome constructive criticism. If you have any comments or suggestions regarding this newsletter and the content contained inside it please tell us.

# News and Related Information

## What is Office Mobile?

If you have a smart phone with a red office logo on it, this is Office Mobile. This has been designed specifically to work on smart phone devices. This allows you to view and edit Excel, Word and PowerPoint documents from almost anywhere. It has been optimised for the Windows Phone but it is also available on Android and iOS. Once installed you will be taken to the Office Hub which lets you access all your office documents.



Excel Mobile lets you: view and edit formulas and basic worksheet functions; quickly view the sum, average, max, min and count from a range of cells; insert basic chart types (column, line, pie, bar, area, xy scatter); sort and filter tables of data (no merged cells); apply basic character formatting (bold, italic and underline); apply basic number formatting (dates, currency and percentage); view and edit comments; resize rows and columns and there is even a find box. It is not possible to add or remove worksheets, add or remove rows or columns or edit any advanced worksheet functions.

Word Mobile lets you: highlight, copy and paste text; apply basic character formatting (bold, italic, underline, strikethrough, increase font, decrease font; insert comments; change font colours (orange, green, red); apply highlighting (yellow, green, red); outline view for navigation; insert emoticons and there is even a find box. It is not possible to undo, copy and paste graphics, cut/remove any text or graphics or apply styles or bullets.

PowerPoint Mobile lets you: view and run slideshows (with animation); edit text inside placeholders; add notes; change the slide order and even hide individual slides. It is not possible to insert pictures, graphics, photos, movies or access the master slides.

## What is Office Online?

Previously known as Office Web Apps. This is the term used for the browser versions of Microsoft Office. There are online versions of the following five applications: Excel, Word, PowerPoint, Outlook and OneNote. They can be used in most types of browser (including the latest versions of Firefox, Chrome and Safari). If you are using a machine that doesn't have Office installed and you need to view, edit or transfer files then this can be easily done just using a browser. It is very easy to share files and collaborate with other users online. Multiple users can edit the same files at the same time and scrolling and searching is very fast.

Excel Online lets you: collaborate on the same workbook simultaneously with other users; create charts and tables; access most of the worksheet functions; hide/unhide/insert and delete sheets, rows and columns; use the fill handle; formula bar; autocomplete; auto sum; hyperlinks; sort and filter data plus run your Apps for Office.

Excel Online does not allow you to: view workbooks larger than 10MB; support VBA scripting; data validation; conditional formatting; what if analysis; replace functionality; advanced formula tools; insert comments; use any recommended charts or smart formatting.

## What is Office 365?

Office 365 is a subscription based version of Microsoft Office which includes SharePoint and Skype. Office 365 can be used from any device (Smartphone, Browser, or Desktop) and integrates seamlessly with Office Mobile and Office Online. This subscription allows you to install the latest full versions on your desktop and updates are automatic so you will always have the latest version (with service packs). Internet access is required to install, activate and manage your 365 subscription account. Office 365 is available in over 40 different languages.

Office 365 for professionals and small businesses gives you access to your email, important documents, contacts, and calendar from virtually anywhere on almost any device. This plan is ideal for organizations with fewer than 25 employees that do not have dedicated IT staff. Office 365 for midsize businesses and enterprises is designed for organizations with advanced requirements. There are a number of different plans:

<b>365 Personal</b>	2 devices per user	Email, Skype, OneDrive and Office 365 ProPlus
<b>365 Home Premium</b>	5 devices per user	Email, Skype, OneDrive and Office 365 ProPlus
<b>365 Small Business</b>	5 devices per user	Email, Skype, OneDrive, Hosted SharePoint (no desktop versions)
<b>365 Small Business Premium</b>	1 – 10 Employees 5 devices per user	Email, Skype, OneDrive, Hosted SharePoint and Office 365 ProPlus
<b>365 Midsize Business</b>	11 – 250 Employees	Email, Skype, OneDrive, Hosted SharePoint, InfoPath and Office 365 ProPlus
<b>365 Enterprise E Plans</b>	250+ Employees	Enterprise level features and support

## Office 365 ProPlus (subscription)

This is a subscription based service that provides you with desktop versions of Excel, Word, PowerPoint, Outlook, OneNote, Publisher and Lync. It uses a Click-to-Run installation and provides updates automatically. Office 365 ProPlus is connected to the user and provides access from multiple devices concurrently. Keep older versions of Office side by side on your PCs to mitigate any potential file or add-in compatibility risks. It uses Office on Demand to cache updates in the background so the next time you close and re-open an application any updates are automatically installed.

## Office 2013 Professional Plus

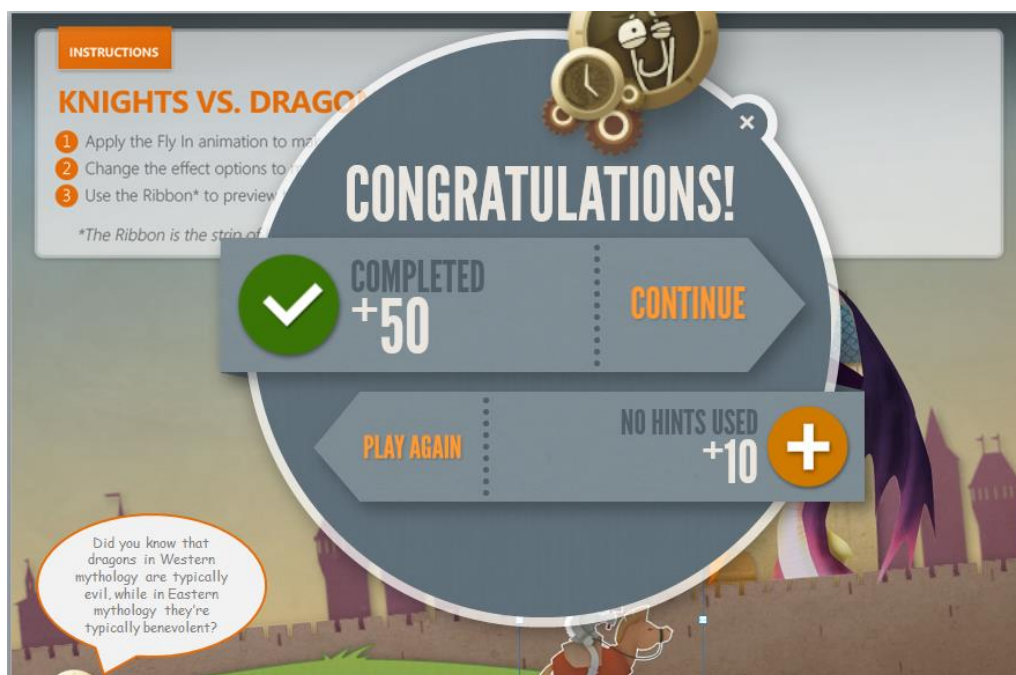
This is the conventional desktop versions of Excel, Word, PowerPoint, Outlook, OneNote, Publisher, Lync. It requires Windows Installer Package (MSI) installation and is directly connected to the hardware or device it is installed on. Any updates or service packs need to be installed manually.

## What is OneNote?

OneNote is part of the Microsoft Office family and is a program for taking notes. Whether this is typed text, screen shots, photos, sketches or handwriting scribbles all this information is quickly and easily organised into pages and sections. You can also include different types of media (audio and video), hyperlinks, technical drawings, and presentations. Save any web page to OneNote and view it later, online or offline. You can share and edit the information simultaneously between multiple users on any device (including Mac). There is even a version of OneNote for Office Mobile so you can use it on your Smartphone. All your information is quickly accessible and editable. To find out more visit: <http://onenote.com>

## Ribbon Hero 2 (The Sequel)

Ribbon Hero 2 is a sequel to Ribbon Hero (featured in our October 2010 newsletter). This learning add-in was created by Microsoft and has been designed to help people use Office 2010 and 2007. If you enjoyed playing Ribbon Hero 1 then you will love this version. It has lots of animations and graphics and feels even more like a game than a learning tool. Once installed you will see an additional group appear on the Home tab of the following applications: Excel, Word, PowerPoint and OneNote. The best thing about this version is that it features the office assistant Clippy (from Office 2003) and also includes a comic strip. Clippy travels to the Middle Ages, Ancient Greece, Renaissance Period and even the future. In each time zone, you must complete specific tasks before moving to the next one. Find out more at <http://ribbonhero.com/>



## Channel 9

This is a community site containing videos and tutorials on all the different Microsoft Office products. The site also contains discussions, screencasts and interviews. There is tonnes of useful information and there is even a Windows 8 app for quick and easy access. However if you just want to take a break from your work, check out the following link (very amusing): <http://channel9.msdn.com/series/office>

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# Your Questions and Problems

## Excel – Why are my cells getting formatted automatically?

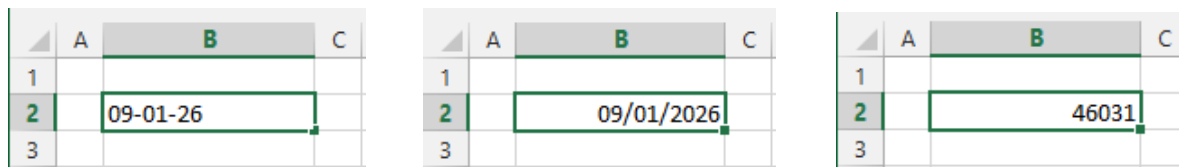
Have you ever noticed automatic number formatting when you enter new data or create new formulas? It is a very subtle feature and most of us probably don't even notice when it happens. This automatic formatting can appear in a number of different places. Sometimes it can be useful, other times it can be quite frustrating. The most annoying time though is when you use the Text to Columns feature or when data is imported into Excel from other systems and it automatically converts strings to dates.

### Example 1 - Text to Columns

The way a date is displayed on a worksheet depends on the number format applied to that cell "before" the date is entered. When you type a string (that Excel thinks is a date) and the number format is "General" then the text string can be converted to a date (or time) automatically and the number format changes accordingly. The only official article that we found relating to this feature was Knowledge Base 214233. It states:

*"if a number contains a slash mark / or a hyphen -, it may be converted to a date format. If a number contains a colon : or is formatted by a space and the letter A or P, it may be converted to a time format"*

Let's see an example, select cell "B2" and check that the number format is "General". Type 09-01-26 into this cell and press Enter. Notice that it changes automatically to 09/01/2026. In fact what has actually happened is that the value has been automatically converted into a date and the number format has been changed accordingly. Select the Format Cells dialog box and you will see that the number format has been changed to "dd/mm/yyyy". Even if you change the number format back to "General" or "Text" you cannot get back to your original string. The value remains 46031.



There are a number of specific character combinations which Excel will translate into either a date or time.

- 1/7 = 01-Jul (dd-mmm)
- 01-07-11 = 01/07/2011 (dd/mm/yyyy)
- 1-7 = 01 Jul (dd-mmm)
- Jul-1 = Jul-01 (mmm-yy)
- 12 A = 12:00 AM (h:mm AM/PM)
- 01-07 = 01-Jul (dd-mmm)
- 1 Jul 26 = 01-Jul-26 (dd-mmm-yy)
- 1/1/26 = 01/01/2026 (dd/mm/yyyy)
- 12:25 = 12:25 ("hh:mm")
- 11 P = 11:00 PM (h:mm AM/PM)

### Example 2 - Worksheet Functions

Automatic formatting can also appear when you use worksheet functions. There are a number of worksheet functions which, when used, will result in the number format of that cell changing automatically.

	A	B	C	D	E
1					
2		01/04/2014	=DATE(2014,4,1)	Format: dd/mm/yyyy	
3		8:30 AM	=TIME(8,30,5)	Format: h:mm AM/PM	
4		20/03/2014 19:59	=NOW()	Format: dd/mm/yyyy hh:mm	
5		20/03/2014	=TODAY()	Format: dd/mm/yyyy	
6					

Select cell "C2" and check that the number format is "General". Type the formula "=DATE(2014,4,1)" and press Enter. Select the Format Cells dialog box and look at the number format. It has been changed to "dd/mm/yyyy".

### Example 3 - Formulas

Automatic formatting can also appear when you are using formulas. When you enter a formula into a cell which has the “General” number format. That number format is changed automatically to match the number format in the referenced cells. If your formula refers to multiple cells that have different number formats applied to them Excel will use its own rules to decide which number format to apply. Once a number format has been changed from “General” to something else, it will not be changed again. Changing the cell value or the number formatting of referenced cells will have no effect.

	A	B	C	D	E	F	G	H
1								
2		<b>Values 1</b>		<b>Values 2</b>		<b>=B2+D2</b>		
3		01/04/2014 Format: dd/mm/yyyy		15 Format: General		16/04/2014 Format: dd/mm/yyyy		
4		12:00 PM Format: h:mm AM/PM		0.05 Format: General		1:12 PM Format: h:mm AM/PM		
5		10.120 Format: 0.000		5 Format: General		15.120 Format: 0.000		
6		3% Format: 0%		0.5 Format: General		53% Format: 0%		
7								

Cell “B3” contains a date and has the number format “dd/mm/yyyy”. Cell “D3” contains a value and has the number format “General”. Select cell “F3” and check that the number format is “General”. Type the following formula “=B3+D3” and press Enter. Select the Format Cells dialog box and you will see that the number format has been changed to “dd/mm/yyyy”. There is no way of switching this feature off. Some more information can be found in the Knowledge Base 214233 article.

### Example 4 - VBA Code

Automatic formatting can also occur when you populate cells using VBA code. When you type “01/07/2014” into a cell, this gets recognised as a date automatically and the number format gets changed to “dd/mm/yyyy”. You might expect the following two subroutines to give us the same result, but they don’t. In both of these situations a date is recognised but it is assumed that it has been entered in the US date format of “mm/dd/yyyy”.

```
Public Sub PopulateData1()
    Range("B2").Value = "01/07/2014"
    Range("B2").NumberFormat = "dd/mm/yyyy"
End Sub

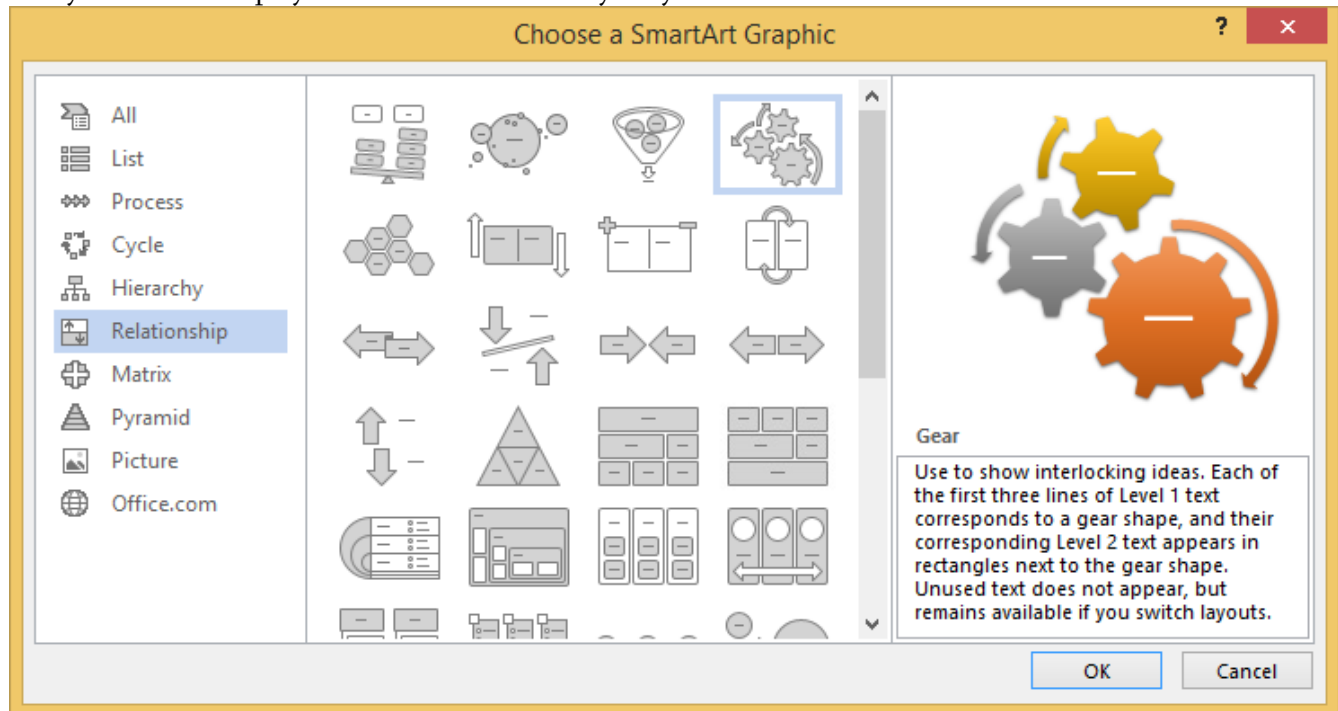
Public Sub PopulateData2()
    Range("B4").NumberFormat = "dd/mm/yyyy"
    Range("B4").Value = "01/07/2014"
End Sub
```

If you want to enter dates using VBA code then you need to convert the date to its date serial number first before adding it to the worksheet. Once the serial number has been added you can apply your date format.

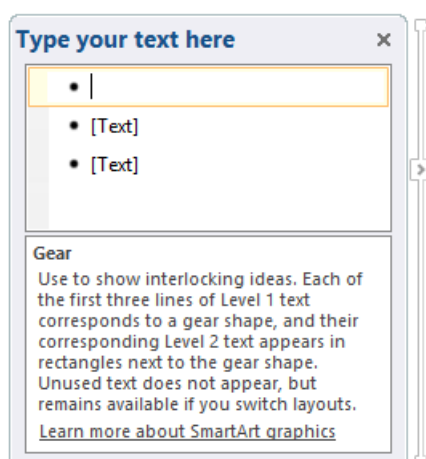
```
Public Sub PopulateData3()
    Range("B6").Value = CLng(CDate("01/07/2014"))
    Range("B6").NumberFormat = "dd-mmm-yy"
End Sub
```

## Introduction to Smart Art

SmartArt graphics are available inside the following applications (Excel, Word, PowerPoint and Outlook) with PowerPoint probably being the most used. These graphics can be used as visual representations for your information and ideas. To add a SmartArt graphic to your document select (Insert > SmartArt). There are over 200 built-in layouts split across eight categories: List, Process, Cycle, Hierarchy, Relationship, Matrix, Pyramid, Picture and Office.com. Picture and Office.com were added in 2010. The amount of text and type of information that you want to display will influence which layout you choose.



When you insert a SmartArt graphic the text pane should be displayed by default. You can quickly display or hide the text pane by clicking on the small arrow on the left hand side of the graphic. You can either type your text directly into the text pane or directly into the SmartArt object. As you edit the data in the text pane, the graphic is automatically updated. Shapes are added or removed as needed. Each SmartArt graphic defines its own mapping between the bullets in the text pane and the set of shapes in the SmartArt graphic.



The text pane always appears to the left of your graphic and will resize automatically as the graphic is resized. At the bottom of the text pane, you will see additional information about that specific graphic.

If you like shortcut keys then you can press TAB to indent or SHIFT+TAB to reverse indent. Character formatting, such as font, font size, bold, italic, and underline, can be applied to your text although it will not be visible in the text pane. When the font size in one shape shrinks because of too much text, the font size of all the other shapes will also shrink to the same size. In PowerPoint there is an additional command to help you quickly convert text to SmartArt (Home > Paragraph > Convert to SmartArt). The graphics are highly customisable. You can change and resize individual shapes, change fills, outlines and effects. The text that appears in your shapes is also highly customisable and includes a large style gallery. If you find your formatting has got a little bit too creative you can select (SmartArt Tools, Design Tab)(Reset Graphic) to remove all of your formatting changes and start over.

# Function - SUBTOTAL

The arguments for this function are: **SUBTOTAL(function\_num, ref1, ref2 [,ref3])**

**function\_num** - 101 to 111 exclude rows hidden by Filtering, Manual Hiding and Grouping.

**function\_num** - 1 to 11 exclude rows hidden by Filtering.

Rows can be hidden in a variety of different ways (filtering, manual hiding and grouping). The behaviour of this function with regards to hidden rows is somewhat confusing. The name of this function is also confusing because it can actually be used to calculate and return a variety of different functions (11 in fact). The most common ones are SUM, AVERAGE and COUNT.

In cell "C2" insert this function using a function number of 9. This will return the sum of "C7:C13". In cell "C3" insert this function with a function number of 1. This will return the average of "C7:C13". In cell "C4" insert this function with a function number of 2. This will return the count of "C7:C13".

	A	B	C
1			
2		=SUBTOTAL(9,C7:C13)	280
3		=SUBTOTAL(1,C7:C13)	40
4		=SUBTOTAL(2,C7:C13)	7
5			
6		<b>Category</b>	<b>Number</b>
7		Monday	10
8		Monday	20
9		Monday	30
10		Monday	40
11		Monday	50
12		Tuesday	60
13		Tuesday	70

## Filtering

Let's apply filtering "B6:C13" and let's filter column "B" to only show Monday. You will notice that the results in C2, C3 and C4 have updated to ignore the two hidden rows. When data is filtered using a drop-down list any rows that are hidden will always be excluded.

	A	B	C
1			
2		=SUBTOTAL(9,C7:C13)	150
3		=SUBTOTAL(1,C7:C13)	30
4		=SUBTOTAL(2,C7:C13)	5

## Manual Hiding

Let's now perform a similar action by manually hiding rows "8" and "9". This time you will notice that cells C2, C3 and C4 have not updated. This is because when you use the function numbers 1 to 11, manually hidden rows are not excluded. Change the numbers in the subtotal functions to be 109, 101 and 102 respectively. Now the manually hidden rows are excluded from the subtotal function.

	A	B	C
1			
2		=SUBTOTAL(109,C7:C13)	230
3		=SUBTOTAL(101,C7:C13)	46
4		=SUBTOTAL(102,C7:C13)	5

## Grouping

Rows can also be hidden using a technique called grouping (or outlines). It is possible to group rows together so they can be quickly displayed or hidden. When rows are grouped a black line appears on the left hand side and a plus or minus sign will indicate if the rows are displayed or hidden. Before we create the two groups, insert a blank row below row 11. Select rows 7 to 11 and create a group for the Monday's. Select rows 13 to 14 and create a group for the Tuesday's. Close the Tuesday group to hide rows 13 and 14. The hidden rows are excluded from the subtotal functions. If you use the function numbers 1 to 11 rows hidden by grouping are not excluded.

1	2	A	B	C
		=SUBTOTAL(109,C7:C13)		150
		=SUBTOTAL(101,C7:C13)		30
		=SUBTOTAL(102,C7:C13)		5
		<b>Category</b>	<b>Number</b>	
		Monday	10	
		Monday	20	
		Monday	30	
		Monday	40	
		Monday	50	

In 2010 the **AGGREGATE** function was introduced to replace this function. This function provides more clarity about the different methods of excluding rows and columns.



# Function - YIELD

The arguments for this function are: **YIELD(settlement, maturity, rate, pr, redemption, frequency [,basis])**

This function returns the annual interest rate for a series of equal cash flows at regular intervals and often appears in financial models. It can be used to calculate the yield to maturity for a bond or in other words what the return/profit will be if you buy a bond and hold it to maturity. The yield to maturity of a bond is defined as the internal rate of return of all the cash flows, including the initial investment and final payment.

Things to be aware of when using this function:

- It always takes annual arguments and always returns an annual interest rate.
- The interest rate is calculated on a compounding basis.
- The compounding frequency is determined by the frequency of the coupon payments.
- Any accrued interest is automatically included.
- The yield can be calculated for any settlement date, including those between interest payment dates.

## Using RATE and IRR

You might see the yield to maturity being calculated using the RATE or IRR functions. These functions can only calculate the yield to maturity on an interest payment date (not between interest payment dates). Most bonds pay a coupon semi-annually so the RATE and IRR functions will only give you the correct value if the settlement date falls on an interest payment date.

	A	B	C	D	E	F	G	H	I
1									
2		Current Price (\$)	96.163		Bond A	Maturity Date	01/01/2017		
3		Current Price (as %)	961.63			Years to Maturity	3		
4		Face Value	1000			9.50%	=RATE(G3*\$C\$7,\$C\$4*\$C\$6/2,-\$C\$3,\$C\$4,0)*2		
5		Redemption Value	100			9.50%	=IRR({-961.63,40,40,40,40,40,1040})*2		
6		Annual Coupon Rate	8%			9.50%	=YIELD(\$C\$9,G2,\$C\$6,\$C\$2,\$C\$5,2,4)		
7		Payment Frequency	2						
8		Day Count	30/360		Bond B	Maturity Date	01/07/2017		
9		Settlement Date	01/01/2014			Years to Maturity	3.5		
10						9.31%	=RATE(G3*\$C\$7,\$C\$4*\$C\$6/2,-\$C\$3,\$C\$4,0)*2		
11						9.31%	=IRR({-961.63,40,40,40,40,40,1040})*2		
12						9.31%	=YIELD(\$C\$9,G2,\$C\$6,\$C\$2,\$C\$5,2,4)		
13									
14					Bond C	Maturity Date	06/02/2017		
15						Years to Maturity	3.1		
16						9.45%	=YIELD(\$C\$9,G16,\$C\$6,\$C\$2,\$C\$5,2,4)		
17									

Bond A – In this example the settlement date falls on an interest payment date with the bond maturing in exactly 3 years. For this particular bond you could use either the RATE, IRR or YIELD functions to return the yield to maturity. Remember if you are calculating the yield to maturity on a bond with a semi-annual coupons the answer from the RATE and IRR functions have to be multiplied by 2 to give an annual interest rate.

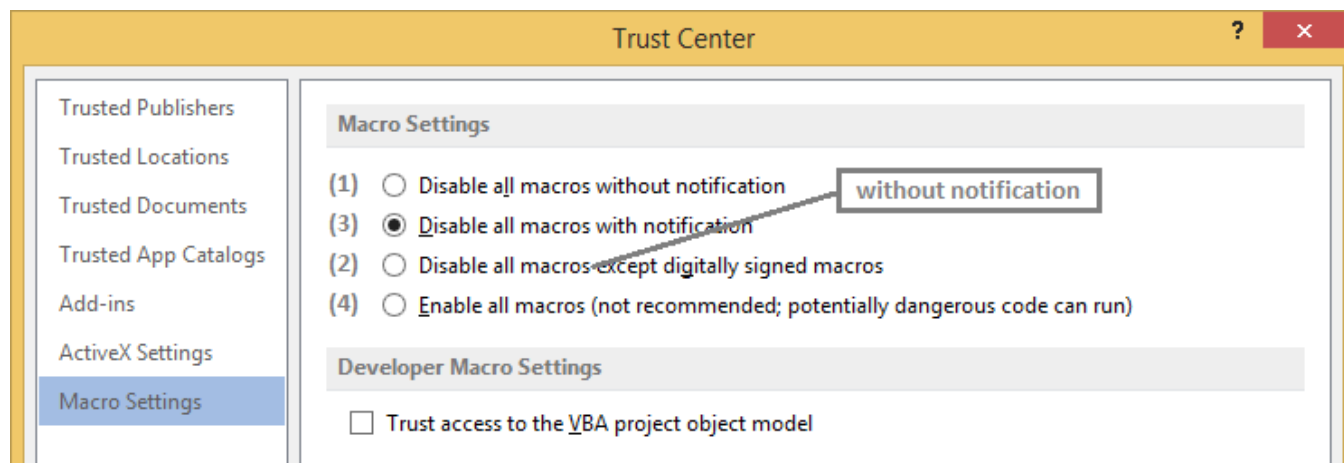
Bond B – In this example the settlement date still falls on an interest payment date with the bond maturing in exactly 3.5 years. For this particular bond you could use either the RATE, IRR or YIELD functions to return the yield to maturity.

Bond C - In this example the settlement date falls between interest payment dates. For this particular bond only the YIELD function will give the correct yield to maturity.

## Macro Security

The Trust Center replaced the Security dialog box in 2007 and contains all the information relating to macro security. In 2013 this can be accessed from (File > Options > Trust Center). There was a “Trust all installed add-ins and templates” checkbox in 2003 but this was replaced by trusted locations in 2007. All macros in trusted locations are always allowed to run and are excluded from the Trust Center security settings.

These settings have always been a source of confusion and still are. First of all we think they are in the wrong order and second of all “without notification” should be added to the description shown below. Here is our summary of what the different options mean and notice that we describe them in a slightly different order to the order in which they appear on this dialog box.



**(1) Disable all macros without notification** (Very High) All macros and security alerts are disabled. If there are any documents that contain unsigned macros that you want to use you need to put them into a trusted location. All macros, not in trusted locations are disabled (signed or unsigned).

**(2) Disable all macros (without notification) except digitally signed macros** (High) In the screenshot above this is actually the third option. All macros are disabled except for those that have been digitally signed by a trusted publisher. You will only see a security alert when you open a document that has a digital signature that does not appear in your trusted publishers list. All unsigned macros are disabled without notification.

**(3) Disable all macros with notification** (Medium) (Default) In the screenshot above this is actually the second option. A security alert is displayed every time you open any document containing macros (signed or unsigned). This lets you make the decision on a case by case basis. This is the default setting.

**(4) Enable all macros** (Low) All macros are enabled and will run (signed or unsigned) and you will never see any security alerts. Using this setting is not recommended as it makes your computer vulnerable to potentially malicious code.

**Trust access to the VBA project object model** (Default is off) This setting is for developers and is used to allow programmatic access to the VBA object model from any Automation client. For any Automation client to be able to access the VBA object model programmatically, the user running the code must explicitly grant access. This option was available in 2003 and has not changed.

**All macros in trusted locations are allowed to run regardless of your macro security setting.  
Each Office application has its own trust center/macro security settings.**