

# ASA Research

## Office 2013 for CPAs



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8. <b>Excel Tips - Consolidating Data</b> – Attendees will learn how to consolidate data (such as budgets, financial reports, departmental reports, inventory lists, salesperson reports, location reports, etc.) using four different techniques as follows: Formulas, spearing formulas, consolidation tools, pivot tools. <b>Data Analysis Tools</b> – Attendees will practice using data analysis tools to slice and dice data, filter data, group data, subtotal data, and pivot data. These topics focus on the most important aspect of Excel – the data tools – which can be specifically used to analyze data and detect anomalies. <b>Queries</b> – Attendees will learn how to pull data directly from an accounting system, from within Excel, for quick and easy data analysis. <b>Sparklines</b> - Sparklines are new tools in Excel that can be used to visually analyze large volumes of data, and attendees will learn how to utilize this tool to save time and provide better data visualizations. <b>Gantt Charts</b> - Excel does not provide Gantt chart functionality, therefore attendees will learn how to apply clever tricks to achieve the desired effect. <b>Combination Charts</b> – Attendees will learn how to create a combination chart – one chart atop another, for comparison purposes. <b>Organization Charts</b> – Attendees will learn how to create an organizational chart using Excel's SmartArt capabilities. ....	30
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## Office 2013 for CPAs CPE Course Information

<b>Learning Objectives</b>	To increase the productivity of accountants and CPAs using Office's newest commands, features and functions
<b>Course Level</b>	Intermediate
<b>Pre-Requisites</b>	Familiarity with Microsoft Office
<b>Advanced Preparation</b>	None
<b>Presentation Method</b>	Live lecture using full color projection systems and live Internet access with follow up course materials
<b>Recommended CPE Credit</b>	8 hours
<b>Handouts</b>	Templates, checklists, web examples, manual
<b>Instructors</b>	J. Carlton Collins, CPA



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## What's New in Microsoft Office 2013?

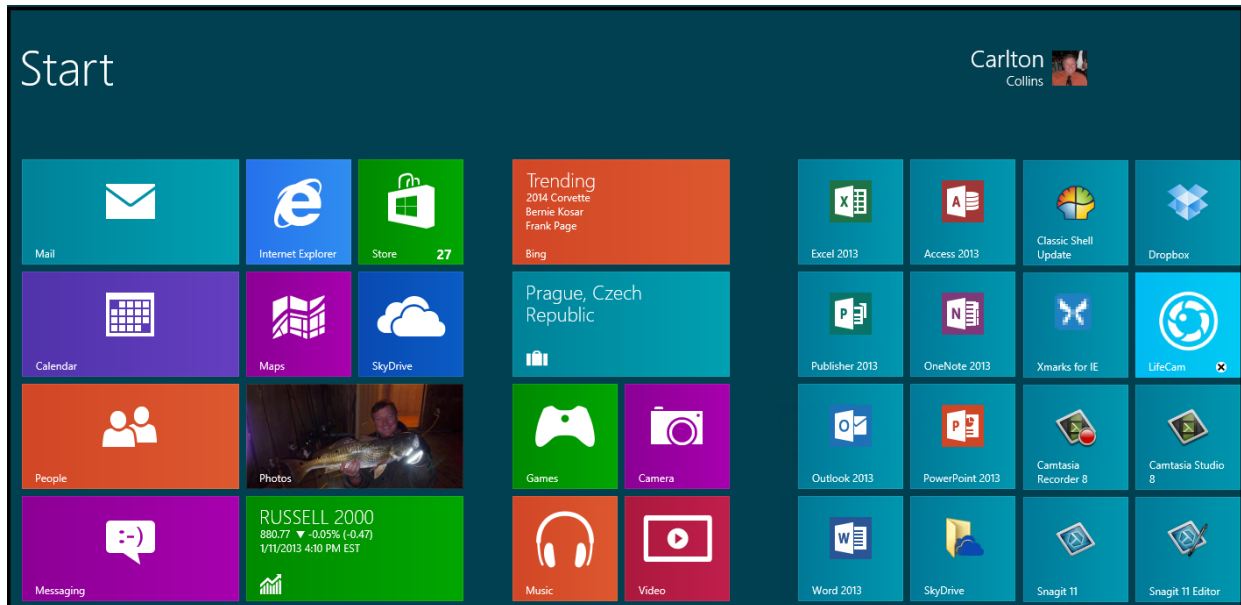
This course covers 8 hours of the very best and most essential Office 2013 functionality that CPAs should be using in the performance of their jobs. This course is best suited for moderate level office users who know how to use the basic functionality of Office, but have seldom explored the more powerful features and capabilities that Office has to offer, including the following new features found in office 2013.

### New Global Features in Office 2013

- 1. No Changes to the 2013 Ribbons** - Many CPAs worry that Office's new touch-screen functionality means the product's new ribbons that will be time-consuming to learn, but this is not the case. Office 2013's ribbons work and look almost exactly like Office 2010's ribbons, and transitioning to the new product involves only a minor learning curve. While the new touch-screen controls provide new ways to launch and use the applications on touch-screen devices, the 2010-style ribbon along with a standard keyboard and mouse remains to be the primary means for operating the product.
- 2. Touch-Enabled** - On mobile devices, the ribbons offer the same menu options, but they are redesigned to better fit smaller hand-held devices. Most of Office's new touch controls work similar to mouse-clicks, but new gestures have been added. For example, you can navigate Excel workbooks or multiple pages in Word by swiping your finger across the screen. You can also pinch and spread to shrink or enlarge your spreadsheets, documents or presentations. A new **Touch Mode** button inserts more space around the Ribbon's icons so operating the touch controls on smaller devices is a little easier.

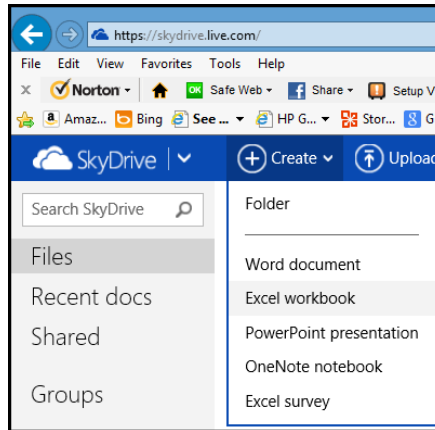


- Windows 8 Style Tiles** - Office's new square, color-coded tiles (*see figure*) are used to launch applications on your tablet, smartphone, or computers equipped with touch-screen monitors. The tiles can be resized and rearranged to your preference, and the color-coded schemes make it easier to identify and select the correct application. Office's tiles match the Windows 8 tiles which have been praised by some for their simplicity and utility.



*Examples of Office 2013 Quick Launch Tiles in Windows 8*

- Quick Demonstration of Excel 2013 on a Touchscreen Mobile Device-**
- Cloud Enabled** - Office binds you to the cloud in many ways. For example, Office automatically connects to your free cloud-based SkyDrive which includes 20 GBs of data storage space, email account, contact management, calendar management, and the following free web apps: 2013 editions of Word, Excel, PowerPoint, and OneNote. These web apps are cloud-based versions of the popular applications (with limited commands and features), accessible from any web browser on a desktop, laptop, tablet or smartphone device.



*Office 2013's Free Web Apps*

- a) See SkyDrive on the smartphone.
- b) See example of opening the same Excel file from SkyDrive on Desktop computer.
- c) **File, Info** – Pick the sheets that browsers can see when opening that file.
- d) Save a file to SkyDrive, show options to invite people, get a link, Post to Facebook or email.

6. **Web Apps** - Since everyone has access to the free web apps, troublesome file-sharing barriers and file compatibility issues are removed; therefore, CPAs can use Office 2013 with the confidence of knowing that documents and workbooks they produce can be easily viewed and edited by others.

7. **Microsoft Office 365** - Office 365 is a new subscription plan for purchasing Office via a monthly rental agreement. Subscription Pricing – Enables you to install Excel on five devices, and run Excel from the cloud.

- a) Pay month-to-month instead of all at once
- b) Installs on more PCs
- c) Never upgrade again
- d) Superior iMap email
- e) Better security
- f) File Sharing
- g) Eliminate upfront capital costs
- h) Eliminate balance sheet liabilities

**Subscription Rental Plan** - Microsoft offers Office via a subscription plan and many CPAs are finding the rental plan to be a better option than purchasing the product.

Pricing options and functionality for selected Office 2013 editions are summarized in the *table* below.

Office Edition	Users/PCs	Price	Included
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***Purchase Options:***

Office Home & Business	1 user/3 PCs	\$279.99	Word, Excel, PowerPoint, OneNote, Outlook
Office Professional	1 user/2 PCs	\$499.99	Word, Excel, PowerPoint, OneNote, Outlook, Access, Publisher

***Subscription Options:***

Office 365 Professional Plus	1 user/5 PCs	\$15/Month	Word, Excel, PowerPoint, OneNote, Outlook, Access, Publisher
Office 365 E3 Plan	1 user/5 PCs	\$20/Month	Word, Excel, PowerPoint, OneNote, Outlook, Access, Publisher, Cloud-based email, Web conferencing, Shared calendars, Cloud-based team sites, Office Web Apps

*Pricing Options for Selected Editions of Office 2013*

Seven advantages for renting rather than purchasing are as follows:

1. **Installs on more PCs** - The subscription plan allows you to install Office professional on five computers or devices, compared to just two or three installations with the purchased product.
2. **Never upgrade again** – Renters will never face an upgrade decision again as future product enhancements are included automatically.
3. **Superior iMap email** - The subscription plan includes a cloud-based email solution using iMap (Internet Message Access Protocol), which is stronger than the traditional Pop3 (Post Office Protocol) email solution. This is because iMap maintains email messages, replies, contacts, tasks and calendars in a central location so you can access them from any of your computers, the web, or mobile devices. In contrast, Pop3 maintains this information on the individual computers, thus accessing this information from multiple computers or devices is more problematic.

4. **Better security** - In the cloud, data is securely encrypted from your computer to the cloud, and your data remains encrypted in the cloud. Your data is also backed up automatically on a continuous basis and is protected by world-class firewalls, anti-virus software, and intrusion monitoring solutions. A significant amount of technology, cost and effort is needed to duplicate this level of security on a local computer or file server.

**Exception – Warning!!!**



**Microsoft's agreement allows them to read your files!!!**

Here's the code of conduct agreement:

<http://windows.microsoft.com/en-us/windows-live/code-of-conduct>

Here's an example article in Forbes:

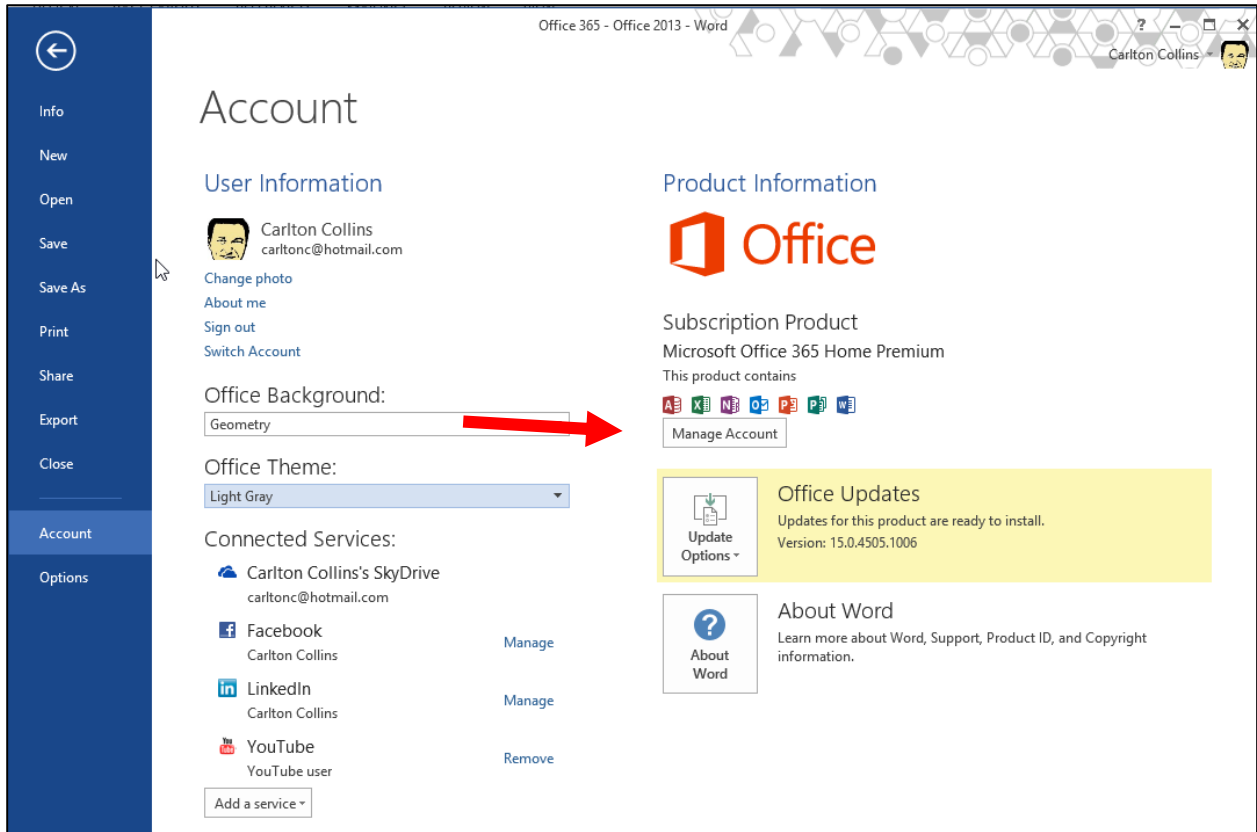
<http://www.forbes.com/sites/kellyclay/2012/07/19/is-microsoft-spying-on-skydrive-users/>

5. **File Sharing** – The subscription plan includes a cloud-based SkyDrive (starting at 20 GBs), team management tools, and file syncing options to help groups work in collaboration. You can grant permission to others to access your SkyDrive files or folders, even if they don't use Office. In the cloud environment, email attachments are unnecessary because you can send recipients a link instead of attachments; as a result, emails travel faster, deliveries are no longer hung up due to attached file size restrictions, and attachments no longer contribute to oversized inbox data files.
6. **Eliminate upfront capital costs** – For larger companies, the subscription plan eliminates their need to borrow money to purchase product. By opting for the “pay as go” subscription plan, companies can expense the costs as a monthly operating expense;
7. **Eliminate balance sheet liabilities** – For larger companies, FASB 47 requires disclosure of long term obligations, but because Office's subscription plan requires no long-term commitment, these rental obligations need not be included on the balance sheet.

## The Office 365 Account Management Screen

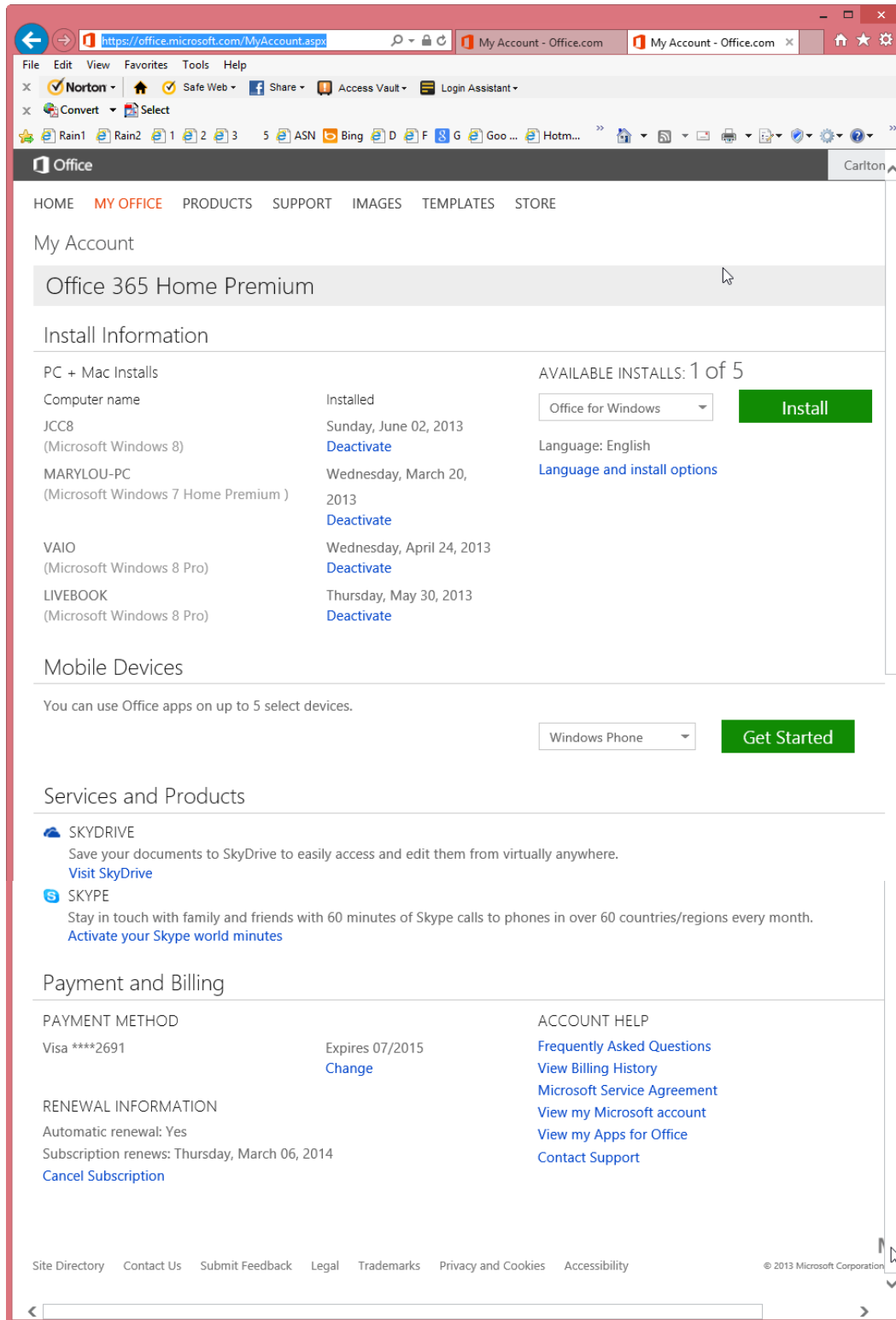
To access your Office 365 account settings, in any Office 365 product, select **File, Account** and click the **Manage Account** button, as pictured below.





(Or if installing Office 365 on a new computer, type <http://office.microsoft.com/myaccount> and log in using your Office 365 user name and password.)

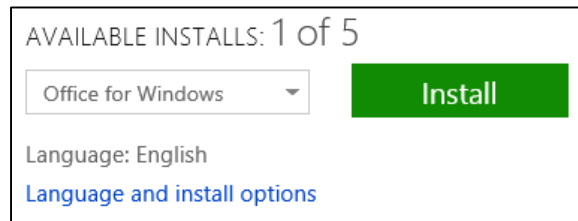
The account management screen appears as follows.



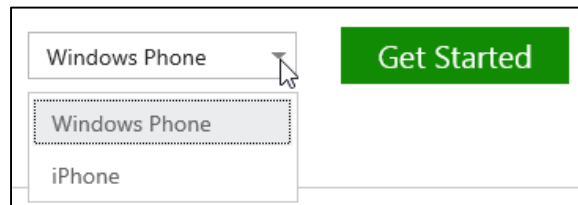
## Office 2013 for CPAs

Notice that this screen provides a list of computers where your five Office 365 licenses have been installed, and you can deactivate any of these licenses at any time simply by selecting the deactivate button.

Also on this screen above, notice the Install button which enables you to install Windows or Mac office 2013 on another computer.

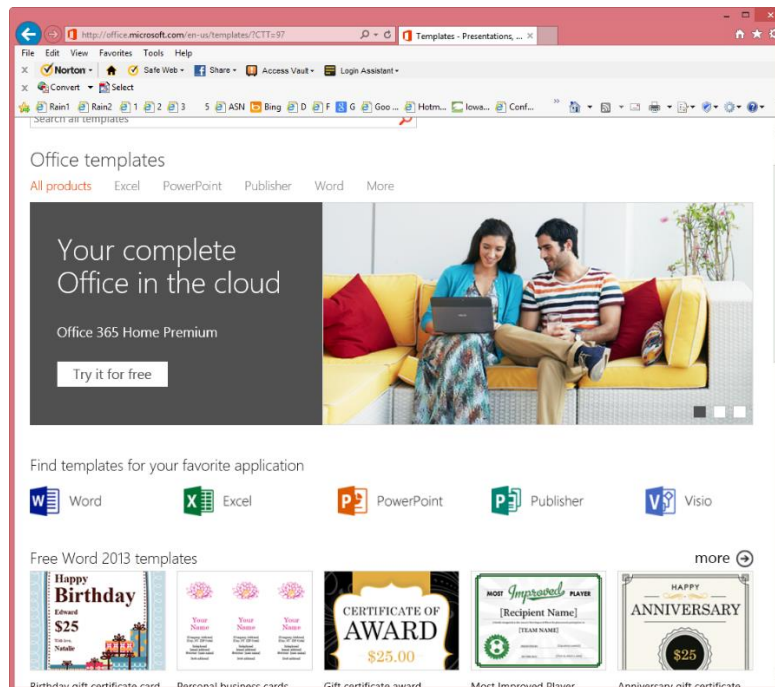


There is also an option for using Office apps on up to 5 selected devices, including an iPhone.



You can try Office 365 free at

<http://office.microsoft.com/en-us/templates/redir/XT103927624.aspx>



## New in Excel 2013

1. **Quick Tour of Menus** – Almost identical to Excel 2010
2. **Touch-Screen Enabled** – Makes Excel accessible on touch-screen mobile devices.
3. **Windows 8 Style Tiles** – Match Windows 8 tiles, easier to touch on a smaller mobile device.
4. **Cloud-Enabled** – Save Excel workbooks directly to your free cloud data storage SkyDrive.
  - a. **SkyDrive (20 to 25 GBs)**
  - b. **Get A Link** – Send Excel workbooks links instead of workbooks via email.
  - c. **Publish Excel Data to Social Media** – Embed Workbooks directly in Facebook.
5. **Office 2013 Web Apps** – a free version of Excel 2013 is available via the cloud.
6. **Subscription Pricing** – Enables you to install Excel on five devices, and run Excel from the cloud.
  - i) **Installs on more PCs**
  - j) **Never upgrade again**
  - k) **Superior iMap email**
  - l) **Better security**
  - m) **File Sharing**
  - n) **Eliminate upfront capital costs**
  - o) **Eliminate balance sheet liabilities**
7. **Excel Instances** - Excel now opens each workbook in a separate instance.
8. **Flash Fill** - Watches you work and applies logic to help you complete your tasks.
9. **Timeline Slicer** - Helps you slice and dice Pivot data containing dates.
10. **Recommended Pivot Tables & Charts** – To help you work quicker and easier.
11. **Quick Analysis** - Helps you analyze data more quickly by offering data layouts.
12. **PowerView** - Enables you to create new report types, such as the interactive map charts.
13. **Create Relationships Tool** – Enables you to build PivotTables from multiple data sources.
14. **More Tables** – Add multiple tables to a PivotTable
15. **Drill Up and Cross Drill** - Drill upward and cross drill to related tables.
16. **New PivotTable Tools** - Decouple PivotCharts so they stand alone.
17. **New Chart Controls** - Excel pops up new chart controls.
18. **Review Tools** - New inquire Add-in reviews design, function and data dependencies.
19. **Excel Compare Tool** - Similar to Word's Compare tool.
20. **Fifty New Functions** – Bring the total number of functions to 455.
21. **Office on Demand** - <https://office.microsoft.com/en-us/myoffice.aspx?CTT=97>
22. **Managing Updates** – From the File, Account menu, you can set how updates install.

These concepts are described in greater depth below.



## New Features in Excel 2013

8. **Excel Now Opens Each Workbook in a Separate Instance** - Prior to Excel 2013, Excel opened multiple workbooks in the same instance of Excel by default. However, it was possible to launch Excel twice, and open workbooks in separate instances – but this approach had a problem in that Excel’s **Paste** function behaves differently when pasting between two instances of Excel compared to pasting between two workbooks opened in the same instance of Excel. Specifically, Excel 2010 and prior editions did not allow you to copy formulas back and forth between Excel files opened in separate instances – only the formula’s calculated value was pasted to the other instance of Excel.

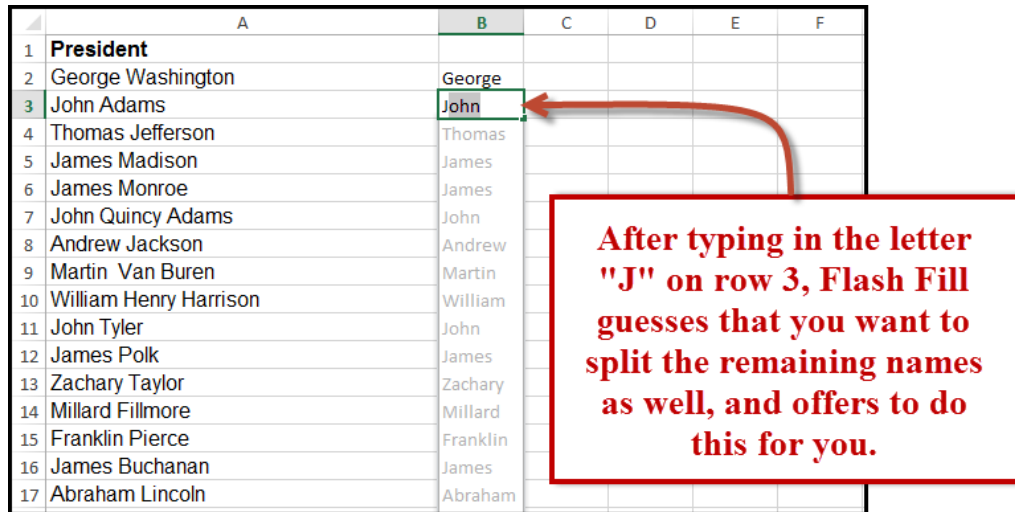
Excel 2013 now solves this problem allowing you to copy and paste formulas between separate instances of Excel. (FYI - Word has always opened Doc files in separate instances).

This issue came to light once CPAs started using dual monitors, and they launched excel on each monitor only to find they could not copy and paste formulas back and forth. In case you have clients or colleagues that still use an older edition of Excel, here are the procedures that you had to follow to display two workbooks simultaneously on dual monitors, and preserve the ability to copy and paste formulas:

1. *Open only one instance of Excel.*
2. *Restore down the Excel window by double-clicking the Title Bar located at the top of the window.*
3. *Stretch the window across both monitors by hovering your mouse pointer over either the left or right edge of the window until your pointer becomes a double arrow, then click and drag the window across both monitors.*
4. *Open two Excel workbooks.*
5. *In Excel 2007 and 2010, select Arrange All from the View tab to display the two workbooks side-by-side, each appearing in a separate monitor. In Excel 2003, select Arrange from the Window menu, select Tiled, and click OK.*
6. *You can now use Paste Special, Value, Add between the two Excel workbooks displayed on separate monitors.*

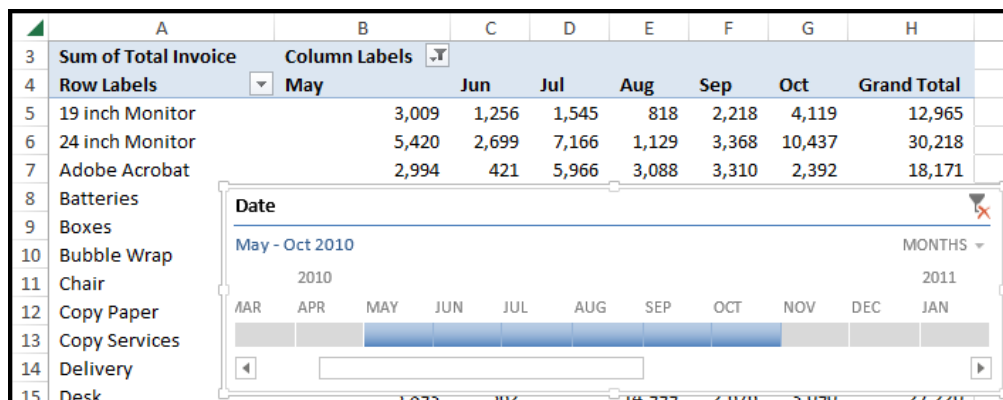
*Note: To avoid undesirable results when stretching a window across two monitors, make sure both monitors are set to the same display resolution.*

9. **Flash Fill** - Of all the Office 2013 applications, Excel is the beneficiary of the most impressive enhancements. Excel’s new **Flash Fill** watches you work and applies logic to help you complete your tasks. The example pictured below (*see figure below*) contains a list of 44 first and last names in Column A, which I want to separate into Columns B and C. As I start typing the first name of the second record in Column B; Excel’s **Flash Fill** guesses what I’m trying to do and offers to fill in the remaining 42 first names (*as shown in grey text*).



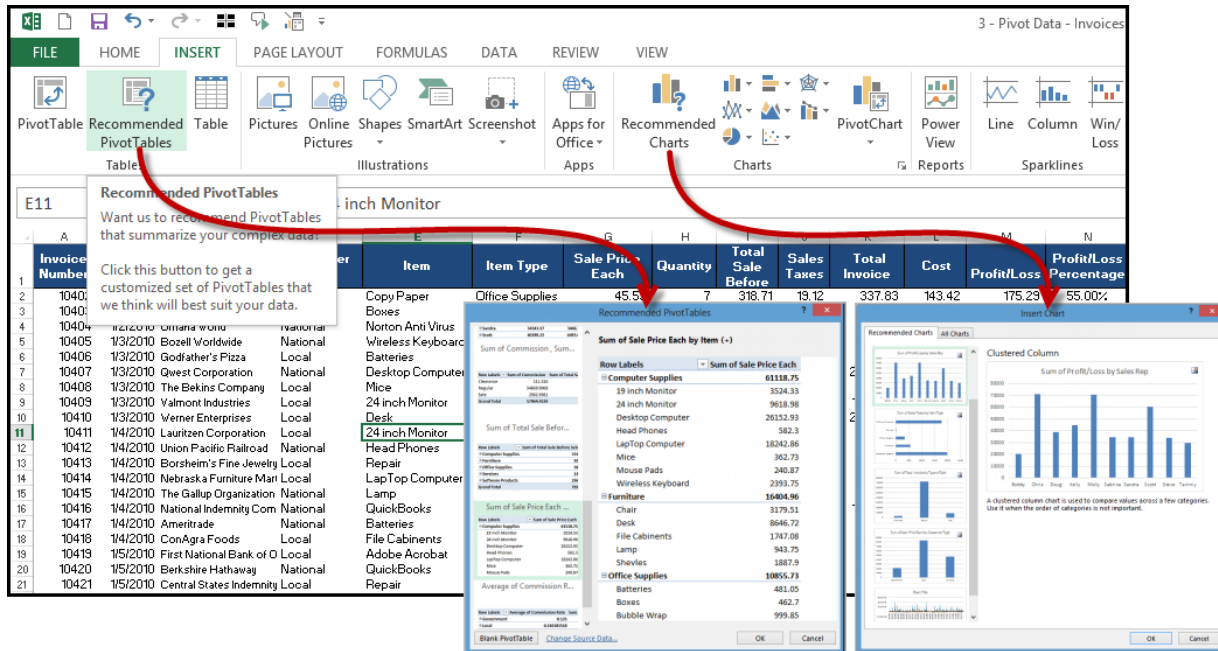
Excel's New Flash Fill Tool

10. **Timeline Slicer** - Excel's new **Timeline Slicer** which helps users *slice and dice* Pivot data that contain dates. As an example, selecting the dates May through October on the Timeline slicer (pictured) adjusts the PivotTable to display May thru October data.



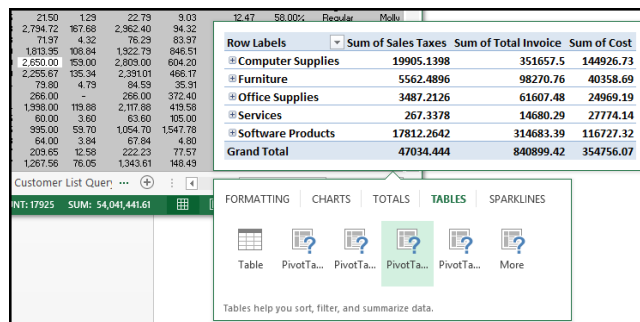
Excel's New Timeline Slicer provides a Visual Method of Filtering a PivotTable by Date

**Recommended PivotTables and PivotCharts** - Excel offers new tools which can analyze your data and recommend a variety of PivotTable and Chart layouts to best illustrate the data. This new functionality is especially useful to novice users who are less familiar with Excel's functionality, but can also help avid Excel users save time too. Simply place the cursor anywhere in your data area and select **Recommended PivotTables** (or **Recommended Charts**) and in return, Excel offers various PivotTable and Chart options and as pictured in the *figure*.



Excel's New Recommend PivotTables and Recommend Charts Tools

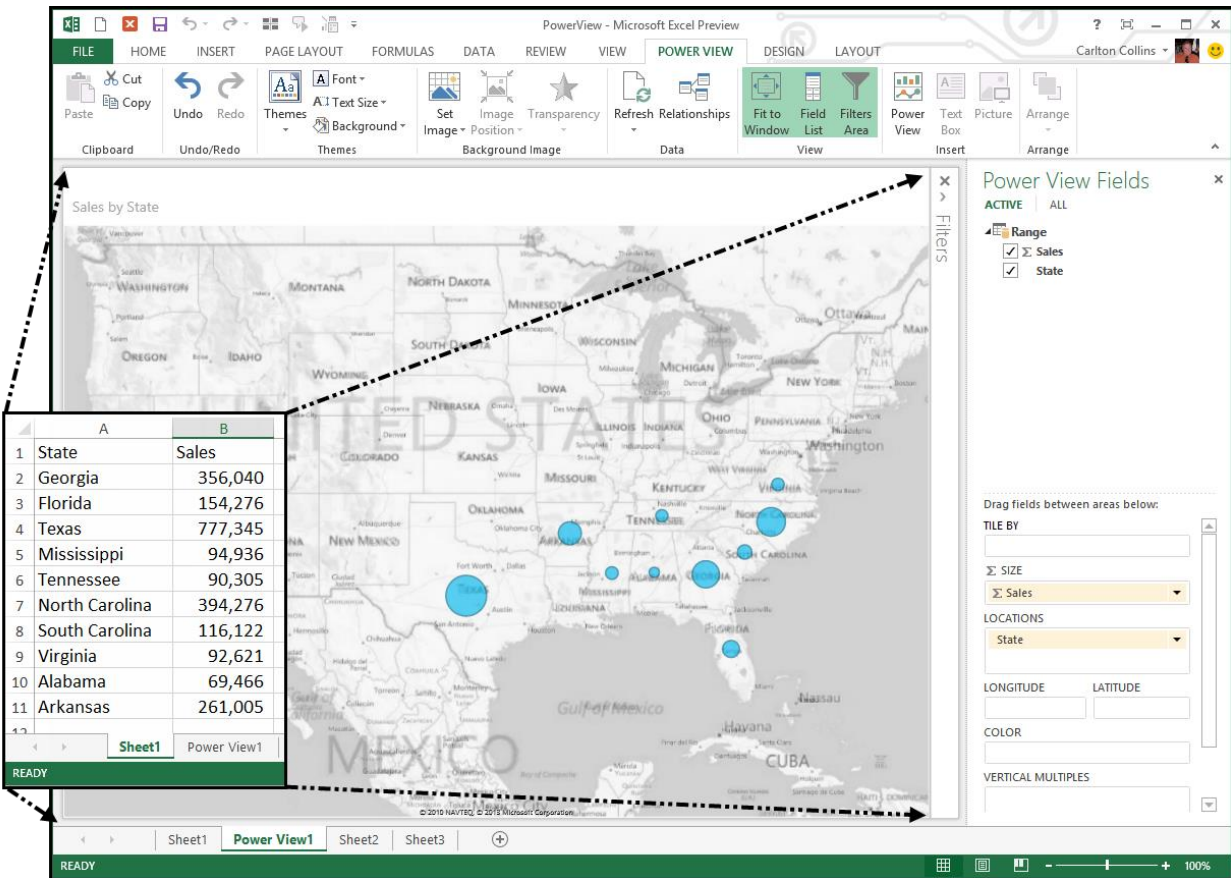
Excel's **Quick Analysis** tool also helps you analyze data by offering a variety of formatting, charts, totals, tables and sparkline layouts to instantly summarize large volumes of data (see figure below). When using Quick Analysis to scrutinize text-only data, text specific options for highlighting duplicate or unique text items appear.



Example of Excel's New Quick Analysis Tool

Simply place your cursor in your data area and then press **Ctrl + A** to highlight your data. Then in the bottom right corner make your selections.

**PowerView** - Excel's new **PowerView** inserts new worksheets connected to your data, and then enables you to create new report types, such as the interactive map chart presented in the figure below. The resulting PowerView Map report is zoomable, and filters can be applied to display partial data.



PowerView Tool Depicting a New Zoomable Map View

A few points about PowerView:

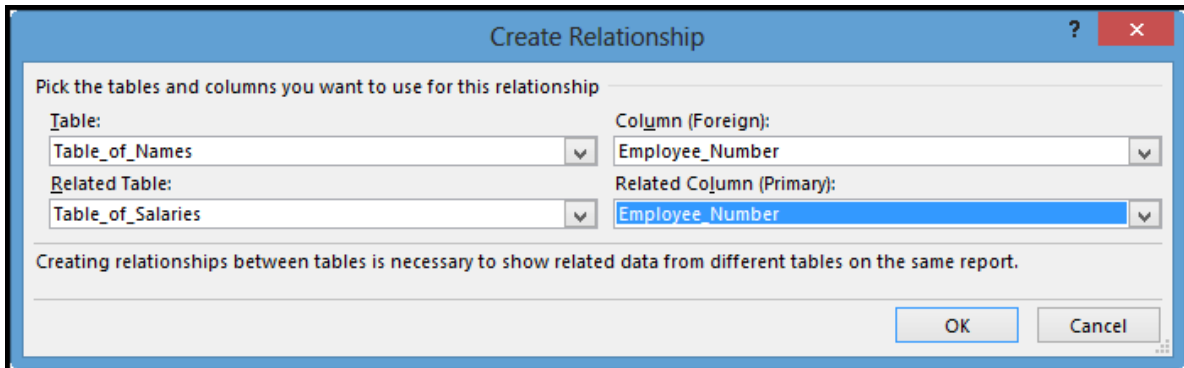
1. PowerView is not included in Office 2013 Professional subscription, it is available in the Office 2013 Professional purchased product and the Office 2013 Professional **Plus** Subscription.
2. You can try PowerView for free here, as prepared in Excel 2013 and published to SharePoint: <http://www.microsoft.com/en-us/bi/GetMicrosoftBI/TryIt.aspx>
3. For demonstration purposes, I will select the **Contoso Tab, Contoso Sample Data**
4. PowerView produces a dashboard containing multiple PowerViews, each with it's own unique view and capabilities.
5. For example, the **Scatter Chart** includes a **Play button**, so you can view data over time.
6. By default, all PowerView reports are linked so one filter applies to all reports. Or if you prefer, click the Filter button in the upper right corner (as you hover a chart) to gain more control over filtering using the **View tab** versus **Chart tab**.
7. An **Advanced Filter Button**, enables you to apply more advanced filters, such as "only those transactions greater than \$1,000".



8. PowerView worksheets can be published as standalone, interactive reports to Microsoft SharePoint's PowerPivot Gallery or other reporting service destinations.
9. You can apply themes and backgrounds, insert pictures and text boxes, insert collapsible and expandable tiles, and add data slicers.
10. I'll give you a quick demonstration using Excel 2013.
  - a. Invoices
  - b. Quick PowerView Map
  - c. Quick PowerView Scatter Chart
  - d. Play the PowerView Scatter Chart

**Create Relationships** - As an advanced enhancement, Excel provides the new **Create Relationships** tool for building table relationships in workbooks that contain at least two tables sharing at least one common field name.

Before you start, you first need to convert your data to **Tables**, using the **Insert Tables** tool. Then, with a PowerView selected, click the **Create Relationships** tool and fill out the resulting dialog box pictured below.



*Excel's New Relationship Tool for Pivoting Multiple Sources of Data*

Once relationships are established, the **More Tables** option can be used to display additional tables allowing you to add data fields from multiple tables to PivotTables, as pictured.

Manager	Apartment	Duplex	Townhome	Triplex	Grand Total
Billy	1,077,536			861,441	1,938,977
Ellen	341,205	442,698	349,899	174,195	1,307,997
Erin	2,348,007	586,193	187,335	1,800,341	4,921,875
Ginger	1,208,894			1,132,021	2,340,914
Jacob		2,084,486	1,043,544		3,128,030
Jim	1,764,734	1,047,999	1,425,499	1,746,691	5,984,923
Kathy	1,534,551				1,534,551
Steve	296,700	810,432	500,280	71,676	1,679,088
<b>Grand Total</b>	<b>8,571,626</b>	<b>4,971,808</b>	<b>3,506,557</b>	<b>5,786,364</b>	<b>22,836,355</b>

Connecting Multiple Sources of Data to a PivotTable

**Drill Up and Cross Drill** - Another PivotTable enhancement involves drillability. Previously, users could only drill down on PivotTable data, but now you can also **Drill Up** and **Cross Drill** to related tables.

**50 New Functions** - Microsoft has added 50 new functions to Excel (increasing the total number of functions to 450), and the following 12 new functions in particular will appeal to many CPAs.

1. **ARABIC** – Converts roman numerals to regular numbers, for example V, IX, and XX are converted to 5, 9, and 20.
2. **CEILING.MATH** – This function can be used to round a number up to a specific interval, such as the nearest 99 cents, as demonstrated in *figure 10*.

	A	B	C	D
1	\$ 24.30	\$ 24.99	=CEILING.MATH(L24,1)-0.01	
2	\$ 24.30	\$ 29.99	=CEILING.MATH(L25,10)-0.01	

Example Use of Excel's New Ceiling.Math Function

3. **DAYS** – Calculates the number of days between two dates.
4. **FLOOR.MATH** - Rounds numbers down to a specific interval, and also can be used to round negative numbers towards zero, instead of towards a smaller number. For example, -8.5 can be rounded to -8.0 (instead of the -9.0 results delivered by the older **Round** function).
5. **FORMULATEXT** – Displays referenced formulas as text, and can be used to improve formula reading, reviewing and printing.

6. **ISFORMULA** – Returns the value TRUE if the referenced cell contains a formula.
7. **ISOWEEKNUM** – Calculates the week during the year in which a given date falls. As an example, I used this formula to determine that I was born in the 53<sup>rd</sup> week of 1959.
8. **PDURATION** - Returns the number of periods required by an investment to reach a specified value. For example, you could calculate that \$1,000 invested at 6% APR would take 26.89 years to reach a value of \$5,000. (This function approach is faster than constructing a 322 row table to figure this out.)
9. **RRI** – This function returns an equivalent interest rate for the growth of an investment. For example, you could calculate that a \$1,200 mutual investment that grew to \$5,600 in 18 years earned an average return of 8.93%.
10. **SHEET** – Calculates the sheet number of the referenced sheet. For example, you might use this function to determine that your interest rate assumptions are entered on the 46<sup>th</sup> sheet in your workbook.
11. **SHEETS** – Calculates the total number of sheets in a referenced range.
12. **SKEW.P** – Like the Skew function, SKEW.P calculates the standard deviation of a string of data, but bases its calculation on the entire population instead of a sample of the population. This function could be used to determine whether each line item of a company's historical financial statement data is consistent enough to use as a basis for projecting the following year's budget.

## Fifty New Functions in Excel 2013

FUNCTION NAME	TYPE AND DESCRIPTION
1. <b>ACOT function</b>	<b>Math and trigonometry:</b> Returns the arccotangent of a number
2. <b>ACOTH function</b>	<b>Math and trigonometry:</b> Returns the hyperbolic arccotangent of a number
3. <b>ARABIC function</b>	<b>Math and trigonometry:</b> Converts a Roman number to Arabic, as a number
4. <b>BASE function</b>	<b>Math and trigonometry:</b> Converts a number into a text representation with the given radix (base)
5. <b>BINOM.DIST.RANGE function</b>	<b>Statistical:</b> Returns the probability of a trial result using a binomial distribution
6. <b>BITAND function</b>	<b>Engineering:</b> Returns a 'Bitwise And' of two numbers
7. <b>BITLSHIFT function</b>	<b>Engineering:</b> Returns a value number shifted left by shift_amount bits
8. <b>BITOR function</b>	<b>Engineering:</b> Returns a bitwise OR of 2 numbers
9. <b>BITRSHIFT function</b>	<b>Engineering:</b> Returns a value number shifted right by shift_amount bits
10. <b>BITXOR function</b>	<b>Engineering:</b> Returns a bitwise 'Exclusive Or' of two numbers
11. <b>CEILING.MATH function</b>	<b>Math and trigonometry:</b> Rounds a number up, to the nearest integer or to the nearest multiple of significance
12. <b>COMBINA function</b>	<b>Math and trigonometry:</b> Returns the number of combinations with repetitions for a given number of items
13. <b>COT function</b>	<b>Math and trigonometry:</b> Returns the hyperbolic cosine of a number
14. <b>COTH function</b>	<b>Math and trigonometry:</b> Returns the cotangent of an angle
15. <b>CSC function</b>	<b>Math and trigonometry:</b> Returns the cosecant of an angle
16. <b>CSCH function</b>	<b>Math and trigonometry:</b> Returns the hyperbolic cosecant of an angle

17. <b>DAYS function</b>	<b>Date and time:</b> Returns the number of days between two dates
18. <b>DECIMAL function</b>	<b>Math and trigonometry:</b> Converts a text representation of a number in a given base into a decimal number
19. <b>ENCODEURL function</b>	<b>Web:</b> Returns a URL-encoded string
20. <b>FILTERXML function</b>	<b>Web:</b> Returns specific data from the XML content by using the specified XPath
21. <b>FLOOR.MATH function</b>	<b>Math and trigonometry:</b> Rounds a number down, to the nearest integer or to the nearest multiple of significance
22. <b>FORMULATEXT function</b>	<b>Lookup and reference:</b> Returns the formula at the given reference as text
23. <b>GAMMA function</b>	<b>Statistical:</b> Returns the Gamma function value
24. <b>GAUSS function</b>	<b>Statistical:</b> Returns 0.5 less than the standard normal cumulative distribution
25. <b>IFNA function</b>	<b>Logical:</b> Returns the value you specify if the expression resolves to #N/A, otherwise returns the result of the expression
26. <b>IMCOSH function</b>	<b>Engineering:</b> Returns the hyperbolic cosine of a complex number
27. <b>IMCOT function</b>	<b>Engineering:</b> Returns the cotangent of a complex number
28. <b>IMCSC function</b>	<b>Engineering:</b> Returns the cosecant of a complex number
29. <b>IMCSCH function</b>	<b>Engineering:</b> Returns the hyperbolic cosecant of a complex number
30. <b>IMSEC function</b>	<b>Engineering:</b> Returns the secant of a complex number
31. <b>IMSECH function</b>	<b>Engineering:</b> Returns the hyperbolic secant of a complex number
32. <b>IMSINH function</b>	<b>Engineering:</b> Returns the hyperbolic sine of a complex number
33. <b>IMTAN function</b>	<b>Engineering:</b> Returns the tangent of a complex number
34. <b>ISFORMULA function</b>	<b>Information:</b> Returns TRUE if there is a reference to a cell that contains a formula

35. <b>ISOWEEKNUM function</b>	<b>Date and time:</b> Returns the number of the ISO week number of the year for a given date
36. <b>MUNIT function</b>	<b>Math and trigonometry:</b> Returns the unit matrix or the specified dimension
37. <b>NUMBERVALUE function</b>	<b>Text:</b> Converts text to number in a locale-independent manner
38. <b>PDURATION function</b>	<b>Financial:</b> Returns the number of periods required by an investment to reach a specified value
39. <b>PERMUTATIONA function</b>	<b>Statistical:</b> Returns the number of permutations for a given number of objects (with repetitions) that can be selected from the total objects
40. <b>PHI function</b>	<b>Statistical:</b> Returns the value of the density function for a standard normal distribution
41. <b>RRI function</b>	<b>Financial:</b> Returns an equivalent interest rate for the growth of an investment
42. <b>SEC function</b>	<b>Math and trigonometry:</b> Returns the secant of an angle
43. <b>SECH function</b>	<b>Math and trigonometry:</b> Returns the hyperbolic secant of an angle
44. <b>SHEET function</b>	<b>Information:</b> Returns the sheet number of the referenced sheet
45. <b>SHEETS function</b>	<b>Information:</b> Returns the number of sheets in a reference
46. <b>SKEW.P function</b>	<b>Statistical:</b> Returns the skewness of a distribution based on a population: a characterization of the degree of asymmetry of a distribution around its mean
47. <b>UNICHAR function</b>	<b>Text:</b> Returns the Unicode character that is referenced by the given numeric value
48. <b>UNICODE function</b>	<b>Text:</b> Returns the number (code point) that corresponds to the first character of the text
49. <b>WEBSERVICE function</b>	<b>Web:</b> Returns data from a web service.
50. <b>XOR function</b>	<b>Logical:</b> Returns a logical exclusive OR of all arguments

## New Features in Word 2013

Word has a number of PDF improvements that might interest the CPA community. When an unprotected PDF file is opened in Word, it instantly is converted to a Word format, ready for editing. Once you've completed your edits, you can save it as a Word document or back to a PDF format. **Note:** Microsoft cautions that PDF documents opened in this manner may contain minor formatting issues—for example, pages may not break exactly as they do in the original PDF file if the PDF document contains images, tables, or objects.

An improvement that reviewers should find useful is Word's improved **Track Changes** format and threaded review conversations, which make it easier to follow the back-and-forth review comments.

Word's improved **Read Mode** provides icons for turning pages with a tap of a finger on touch-screen devices, with a click of the mouse, or by rolling the mouse's scroll wheel. Read Mode allows you to split a document into side-by-side pages or narrow columns to give documents the look and feel of a book—a format that better accommodates speed reading. Double-tapping or double-clicking any inserted object (tables, charts, pictures, and videos) expands them to full-screen size, and you can also stream videos within documents.

Other Word enhancements include vertical and horizontal alignment guides that pop up automatically when you move an image, object, or text box to help you snap them into place correctly on the first try. Cropping or resizing images using the mouse is improved to adjust images in one-pixel increments, rather than three. When you reopen a Word document, Word displays a placeholder tab containing a hyperlink for returning to the last position you were at when you closed the document, so you can quickly pick up where you left off.

## New Features in Outlook 2013

In a significant enhancement, Microsoft has rolled out **Outlook.com**, which provides cloud-hosted centralized email accessible from all of your computers and mobile devices. Outlook's new touchscreen tile design and menus work well on smartphones (see screenshot at left).

Outlook's look and feel has been improved in several ways. The screens and menus are cleaner, and a new **Navigation Bar** has been added at the bottom, providing quick access to Calendar, People, and Tasks. Outlook now provides a **Quick Peek** into the calendar, contact list, and tasks when you hover over these options.

Outlook's new **People Card** can combine disparate sources of contact information (Outlook, LinkedIn, Facebook, etc.) into a single contact record and can also display social media status



updates, pictures, and activity feeds from all your friends and followers. This enhancement enables you to view current social media content for senders or recipients as you read or compose email, perhaps helping you to remember the sender or include a congratulatory comment on the recipient's new grandchild. This approach might help you keep up with your friends, colleagues, and connections solely from within Outlook. New features also allow you to flag, delete, mark, or reply to email messages directly from within the reading pane without opening the email, and you can share a mailbox folder with others, such as a project team.

New **ActiveSync** functionality connects Outlook to Outlook.com or Gmail automatically, without the need to download, install, and configure a complicated connector. This tool also syncs your Outlook.com or Gmail calendars, contacts, and other information associated with those accounts. **Calendar Sharing** offers new tools and a variety of new methods for sharing calendar details directly from within the calendar.

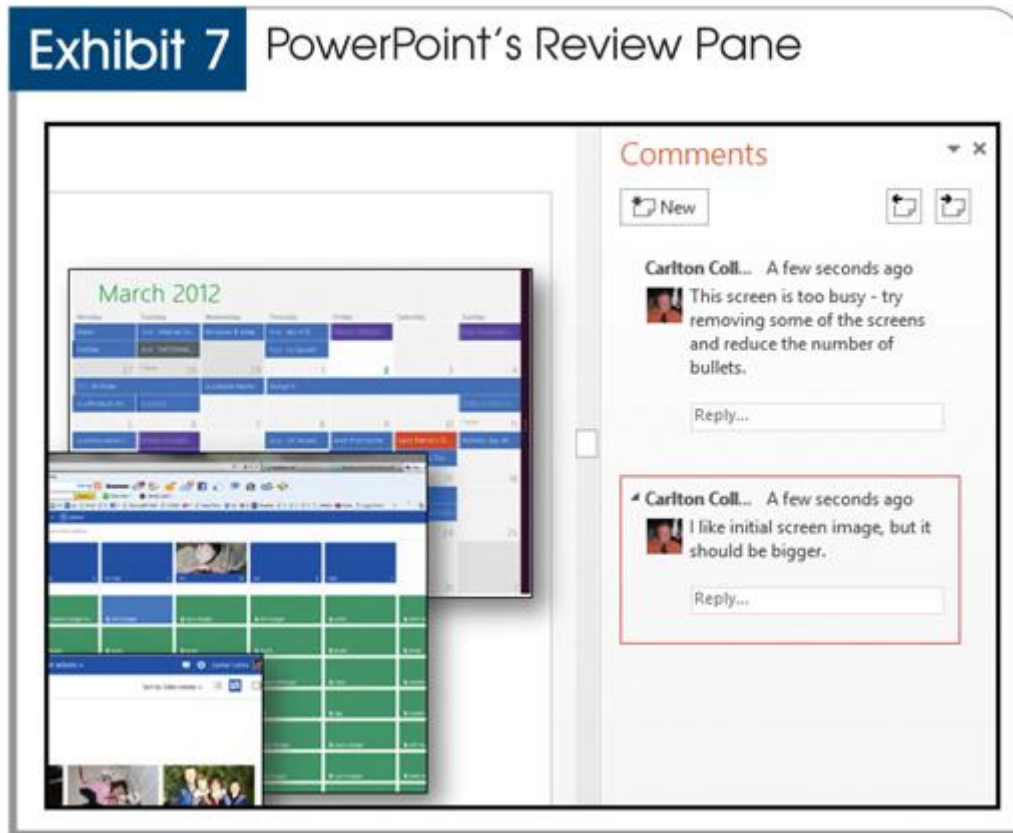
## New Features in PowerPoint 2013

PowerPoint's **Presenter View** has a new look that privately displays teleprompter-style presenter notes, upcoming slides, a presentation timer (with a time restart button), zoom tools, markup tools, touchscreen controls, a stylus, and a touch-screen stylus. Additionally, the **Presenter View** no longer requires a second monitor for use; simply press Alt+F5 to run presenter view on a single monitor, as pictured in Exhibit 6.





When you are making a presentation, the new **Slide Zoom** allows you to double-click on an object or area in a presentation to temporarily enlarge it (pressing the Esc key returns the presentation to a normal view). The new **Navigation Grid** privately displays thumbnail images of all slides on the presenter's screen. New touchscreen gestures such as swipe, tap, scroll, zoom, and pan can be used to present slideshows from your tablet, smartphone, or other touch-screen device. A welcome enhancement is the new **Review Pane** (see Exhibit 7), which features threaded comments and replies similar to those found in Word 2013.



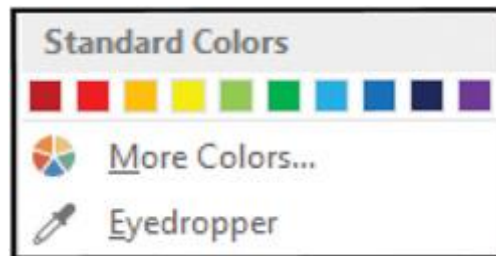
PowerPoint enables you to present live online meetings free via Microsoft Lync, and this platform can now deliver live video and audio with slideshow presentations. Lync allows you to host an unlimited number of audience participants (in some versions), send invitations via email, mute audience members, block audience video, and hide names from other audience attendees. Another noteworthy improvement is Lync's ability to seamlessly play slideshow-embedded video clips from within the presentation.

PowerPoint features more than a dozen new templates and themes, most of which are designed for the newer 16:9 (HD aspect ratio) widescreen monitors and flat screen TVs and projectors. There are 22 new transitions, including Paper Curl, Ferris Wheel, Orbit, Fly Through, Vortex, and Doors, to name a few.

On the slide master, alignment guides can be placed to ensure that slide elements are positioned consistently across all slides. A new option enables you to merge shapes to form a single shape, and text can wrap tightly to that new shape for a professional effect. Because PowerPoint is frequently used with a projector, Microsoft added improved capabilities that will not only detect the presence of a projector, but will also automatically adjust the video output size and resolution settings for optimum visibility. Creating motion paths for text boxes and objects is easier now with new **ghost images** that visually show the user where the animated objects will end in relation to their starting point (shown in the screenshot below).



PowerPoint also added a color **Eyedropper** that makes it easy to match colors (shown in the screenshot below).



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## OneNote 2013 Enhancements

OneNote features a new splash screen; Note Sync between all of your devices (including Windows, Android, and Apple phones); drag and drop whole files; new inking tools for drawing, erasing, editing, and doodling; improved tables with shading, header rows, and data sorting; a mobile app for Android and Apple phones; a new radial menu for easier touch-screen access; touch, pen, or keyboard note-taking; the ability to send notes to a webpage; embed Excel workbooks or Visio diagrams; and search by author capability.

## Access 2013 Enhancements

Access 2013 offers improved relational and multi-table support including a multiple-table indicator for building true relational databases; views from one table automatically display data from related tables; related-item controls automatically summarize data from related tables and queries; drill-through clicks employ behind-the-scenes logic to display data from related sources.

In addition, there are new tools for building a browser-based database app, 2010 web-style database, or traditional desktop database; a browser-based database app automatically creates views and switchboards; new table templates; controls dragged and dropped onto views snap to layout guides automatically; hovering over callouts displays editable properties; and Access now supports three permission levels for author, developer, and reader.

## Alternatives suites to Microsoft Office

Microsoft Office (priced starting at \$119.99 or \$15 per month) commands an estimated 90% to 95% of the U.S. application suite market. The top five alternatives to Microsoft Office are Corel's WordPerfect Office (priced starting at \$229); IBM's Lotus SmartSuite (priced starting at \$19.99); Oracle's OpenOffice (free); Google Docs (free); and Google Apps for Business (priced starting at \$5 per month).

## How much should a new system cost?

Selecting a new computer system is confusing, and no one solution fits all. However, you may find it useful to consider the desktop system I use for comparison purposes. In January 2013 I purchased a new 64-bit, Windows 8 HP Envy computer for \$849 (with 12 GB of RAM, running Intel Core i7-3770 at 3.40 GHz) and installed Office 2013 at a subscription cost of \$20 per month. I kept my two 40-inch monitors (\$299 each) and webcam (\$50). I added QuickBooks Premier Accounts Edition (\$20 per month), Adobe Acrobat XI (\$119), Adobe Photoshop Elements (\$71), Camtasia Studio 8 (\$149), and Snagit (\$39). The resulting computer system is fast and reliable, and all of my data and email messages are accessible from my office computer, home computer, laptops, tablet, and smartphone.

## Upgrade Advice for CPAs

CPAs have much to consider as they weigh a possible jump to Office 2013 (see the sidebar "Office 2013: Rent or Buy?").

Technology leaders will likely embrace the new Office, while laggards will likely hold off as long as they can. Most CPAs fall in the middle, and in my view, upgrading to Office 2013 makes more sense for the following groups of CPAs:

1. **CPAs on Windows 8**, because Office 2013 is designed to work in the Windows 8 environment.
2. **CPAs operating in the cloud**, because Office 2013 provides new features and functions for accessing data in the cloud, running applications from the cloud, and sharing data through the cloud. There are caveats to this, however, which are covered in the sidebar "Office 2013: Rent or Buy?"
3. **CPAs with touch-screen monitors**, because Office 2013 is touch-screen enabled. (Please note that Office 2013's touch-screen tiles will respond to mouse clicks, even in the absence of a touch-screen monitor.)
4. **CPAs who want to use Office on their mobile tablets or smartphones**, because Office's new tile-based buttons, touch-screen controls, and phone-friendly menus help Office operate better on mobile devices.

5. **CPAs on Office 2003 or earlier**, because those editions of Office are well behind the times and Office 2013's enhancements are sufficient to warrant an upgrade.

6. **CPAs on Office 2010 or 2007 who find the new features essential**, because Office 2013 includes many significant enhancements, just one of which could justify upgrading.

The following groups of CPAs may find staying on Office 2010 a reasonable strategy:

1. **CPAs using Windows Vista or XP** have no choice but to stay put because Office 2013 does not run on those platforms.

2. **CPAs remaining on Windows 7**, because Windows 7 does not support touch-screen, therefore Office 2013's new tiles and touch-screen capabilities will be less meaningful.

3. **CPAs who are satisfied** with their current computer systems and are not yet ready to fully embrace the cloud, touch-screen monitors, tablets, or smartphones should probably hold off upgrading. If your systems and software are fairly current and working well, you need compelling reasons to justify the upgrade costs, installation effort, and inherent learning curve. If the cloud and mobile-device solutions and feature enhancements described herein aren't compelling enough, then staying put may be a reasonable strategy for now.

In the final analysis, most CPAs won't jump to the new technology right away—and rightfully so. It probably makes the most sense to upgrade to the latest editions of Windows and Office the next time your computers need replacing. However, tech-savvy CPAs should find enough new functionality to warrant transitioning to Office 2013 sooner rather than later.

## Consolidating Data in Excel

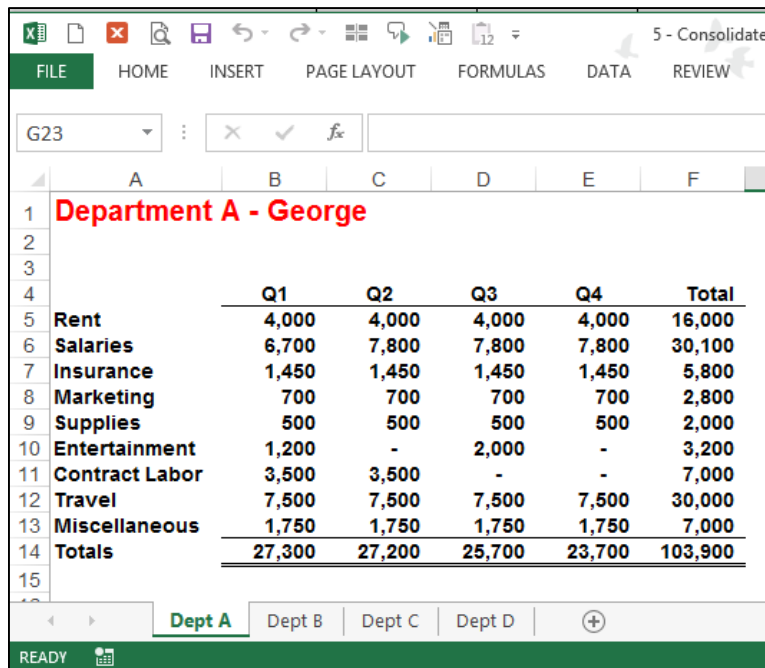
Consolidating data is a common task for CPAs, and Excel offers a variety of methods for performing this task. The particular method you use will probably depend on the layout of your data, and you may need to clean, edit or manipulate your data a bit to prepare it for consolidation. CPAs often have a need to consolidate data such as budgets, months, departments, locations, warehouses and sale representatives.

Following I will explain four different consolidation methods - two methods for consolidating data with similar layouts, and two more methods for consolidating data with dis-similar layouts. These four methods are as follows:

- A. Simple formulas.
- B. Spearing formulas.
- C. The “Data Consolidate Command”.
- D. The “PivotTable Wizard”.

### A. Using Simple Formulas To Consolidate Similar Data

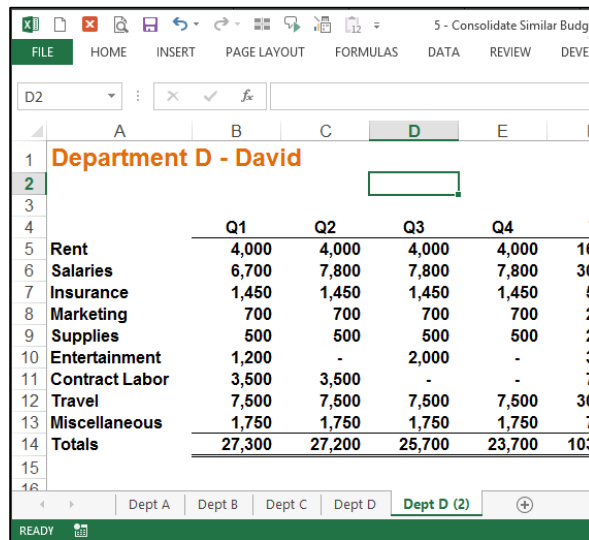
The workbook below contains budgets with identical layouts for Departments A, B, C and D. The goal is to consolidate these four budgets into a single consolidated budget.



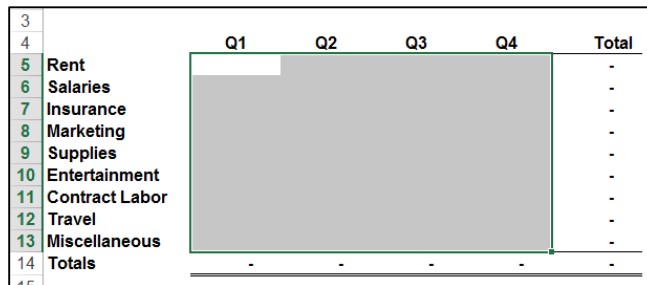
	Q1	Q2	Q3	Q4	Total
<b>Rent</b>	4,000	4,000	4,000	4,000	16,000
<b>Salaries</b>	6,700	7,800	7,800	7,800	30,100
<b>Insurance</b>	1,450	1,450	1,450	1,450	5,800
<b>Marketing</b>	700	700	700	700	2,800
<b>Supplies</b>	500	500	500	500	2,000
<b>Entertainment</b>	1,200	-	2,000	-	3,200
<b>Contract Labor</b>	3,500	3,500	-	-	7,000
<b>Travel</b>	7,500	7,500	7,500	7,500	30,000
<b>Miscellaneous</b>	1,750	1,750	1,750	1,750	7,000
<b>Totals</b>	<b>27,300</b>	<b>27,200</b>	<b>25,700</b>	<b>23,700</b>	<b>103,900</b>

1. Insert a New Worksheet on which the consolidation will appear

- i. **Don't click the New Sheet or Add Sheet Option** - Because there is a better and quicker approach.
- ii. **CTRL + Drag Tab** – To insert a new worksheet, select worksheet labeled “Dept D”; then use the CTRL + Drag Tab keystroke combination to create a duplicate worksheet of Dept D. The advantage is that the data, column widths, page footers and headers, and margin settings are all duplicated automatically, so you don't have to create a new page from scratch.



- iii. (The menu method for achieving this same procedure is to right click on the tab and select Move or Copy, but **CTRL + Drag Tab** is quicker.)
- iv. **Clean the Page** – Clean the new worksheet by deleting the data in the grid area, so that new formulas can be inserted.



- v. **Re-label** – Change the worksheet label in Cell A1 and on the Worksheet Tab to read “consolidated”.



- Formula** – In cell B5, enter a formula adding the B5 cells in the four budget sheets. The formula should look like this:

**= 'Dept A'!B5+'Dept B'!B5+'Dept C'!B5+'Dept D'!B5**

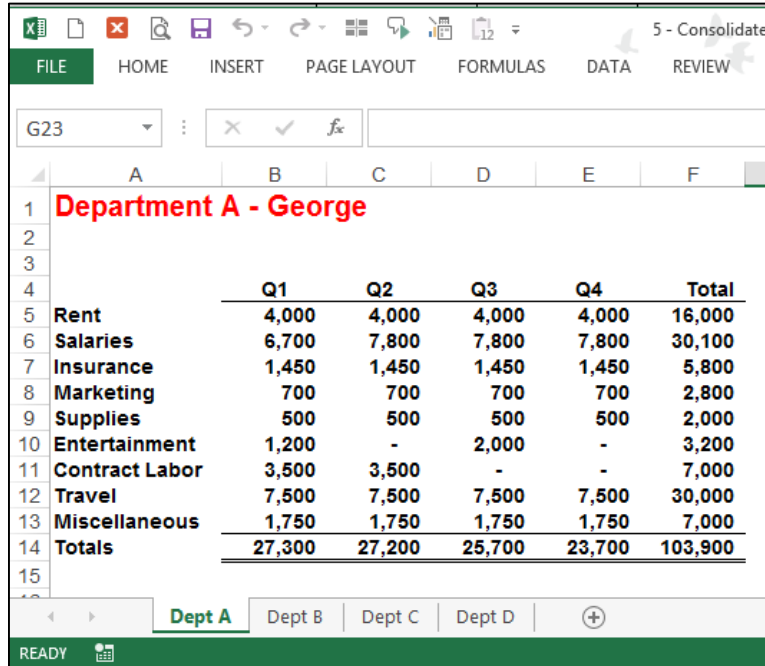
- Copy** – Copy the formula down and across to complete the consolidation, and you are done.

		Q1	Q2	Q3	Q4	Total
5	Rent	14,500	14,500	14,500	14,500	58,000
6	Salaries	24,600	24,800	24,800	24,800	99,000
7	Insurance	4,130	3,600	3,600	3,600	14,930
8	Marketing	2,700	2,700	2,700	2,700	10,800
9	Supplies	1,460	1,460	1,460	1,460	5,840
10	Entertainment	3,205	1,660	4,830	1,800	11,495
11	Contract Labor	9,050	9,050	2,050	2,050	22,200
12	Travel	24,500	24,500	24,500	24,500	98,000
13	Miscellaneous	5,350	5,350	5,350	5,350	21,400
14	<b>Totals</b>	<b>89,495</b>	<b>87,620</b>	<b>83,790</b>	<b>80,760</b>	<b>341,665</b>



## B. Using Spearing Formulas To Consolidate Similar Data

The workbook below contains budgets with identical layouts for Departments A, B, C and D. The goal is to consolidate these four budgets into a single consolidated budget.



	Q1	Q2	Q3	Q4	Total
<b>Rent</b>	4,000	4,000	4,000	4,000	16,000
<b>Salaries</b>	6,700	7,800	7,800	7,800	30,100
<b>Insurance</b>	1,450	1,450	1,450	1,450	5,800
<b>Marketing</b>	700	700	700	700	2,800
<b>Supplies</b>	500	500	500	500	2,000
<b>Entertainment</b>	1,200	-	2,000	-	3,200
<b>Contract Labor</b>	3,500	3,500	-	-	7,000
<b>Travel</b>	7,500	7,500	7,500	7,500	30,000
<b>Miscellaneous</b>	1,750	1,750	1,750	1,750	7,000
<b>Totals</b>	<b>27,300</b>	<b>27,200</b>	<b>25,700</b>	<b>23,700</b>	<b>103,900</b>

### 1. Insert a New Worksheet on which the consolidation will appear

- i. **Don't click the New Sheet or Add Sheet Option** - Because there is a better and quicker approach.
- ii. **CTRL + Drag Tab** – To insert a new worksheet, select worksheet labeled “Dept D”; then use the CTRL + Drag Tab keystroke combination to create a duplicate worksheet of Dept D. The advantage is that the data, column widths, page footers and headers, and margin settings are all duplicated automatically, so you don't have to create a new page from scratch.

	Q1	Q2	Q3	Q4	Total
5 Rent	4,000	4,000	4,000	4,000	16,000
6 Salaries	6,700	7,800	7,800	7,800	30,100
7 Insurance	1,450	1,450	1,450	1,450	5,800
8 Marketing	700	700	700	700	2,800
9 Supplies	500	500	500	500	2,000
10 Entertainment	1,200	-	2,000	-	3,200
11 Contract Labor	3,500	3,500	-	-	7,000
12 Travel	7,500	7,500	7,500	7,500	30,000
13 Miscellaneous	1,750	1,750	1,750	1,750	7,000
14 Totals	27,300	27,200	25,700	23,700	103,900

- iii. (The menu method for achieving this same procedure is to right click on the tab and select Move or Copy, but **CTRL + Drag Tab** is quicker.)
- iv. **Clean the Page** – Clean the new worksheet by deleting the data in the grid area, so that new formulas can be inserted.

	Q1	Q2	Q3	Q4	Total
5 Rent					-
6 Salaries					-
7 Insurance					-
8 Marketing					-
9 Supplies					-
10 Entertainment					-
11 Contract Labor					-
12 Travel					-
13 Miscellaneous					-
14 Totals	-	-	-	-	-

- v. **Re-label** – Change the worksheet label in Cell A1 and on the Worksheet Tab to read “consolidated”.

	A	B	C
1	Consolidated		
2			

Dept D	Consolidated	+
--------	--------------	---

- 2. **Formula** – In cell B5, enter a formula adding the B5 cells in the four budget sheets. The formula should look like this:

**=SUM('Dept A:Dept D'!C5)**

I use the mouse to accomplish this step. Start by typing “=SUM(“, then click on cell B5 in Dept A, hold the shift key down, and click cell B5 in Dept D.

3. **Copy** – Copy the formula down and across to complete the consolidation, and you are done.

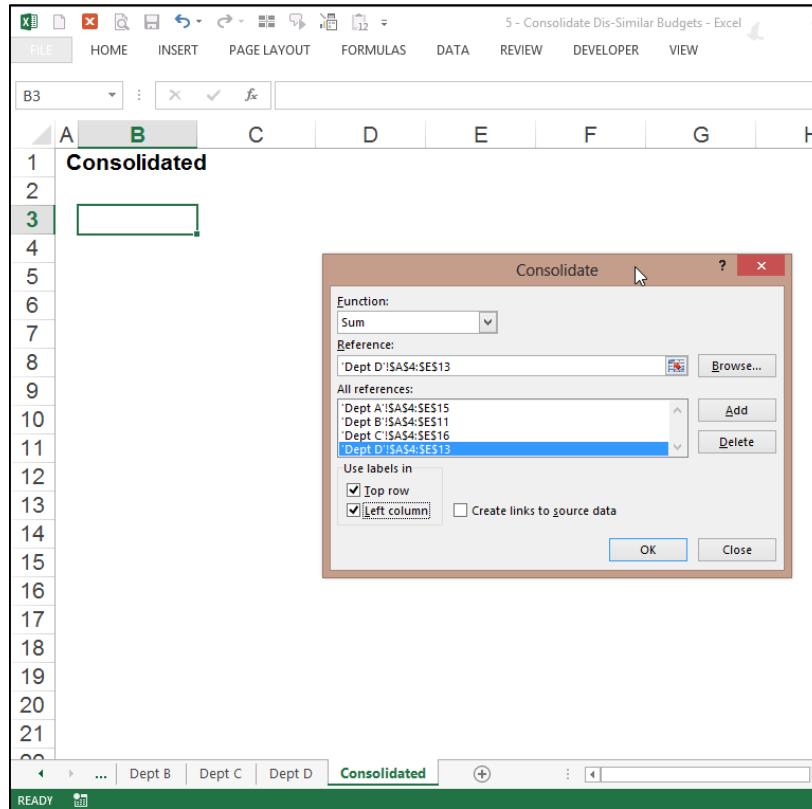
	Q1	Q2	Q3	Q4	Total
<b>5 Rent</b>	14,500	14,500	14,500	14,500	58,000
<b>6 Salaries</b>	24,600	24,800	24,800	24,800	99,000
<b>7 Insurance</b>	4,130	3,600	3,600	3,600	14,930
<b>8 Marketing</b>	2,700	2,700	2,700	2,700	10,800
<b>9 Supplies</b>	1,460	1,460	1,460	1,460	5,840
<b>10 Entertainment</b>	3,205	1,660	4,830	1,800	11,495
<b>11 Contract Labor</b>	9,050	9,050	2,050	2,050	22,200
<b>12 Travel</b>	24,500	24,500	24,500	24,500	98,000
<b>13 Miscellaneous</b>	5,350	5,350	5,350	5,350	21,400
<b>14 Totals</b>	<b>89,495</b>	<b>87,620</b>	<b>83,790</b>	<b>80,760</b>	<b>341,665</b>

## C. Using the “Data Consolidate Command” To Consolidate Dissimilar Similar Data

The workbook below contains dis-similar budgets for Departments A, B, C and D. Specifically, the four worksheets contain budgets for separate departments, and some budgets contain more rows and different row descriptions than others. The goal is to consolidate these four departmental budgets using the **Consolidate** Command.

	Q1	Q2	Q3	Q4	Total
Rent	4,000	4,000	4,000	4,000	16,000
Salaries	6,700	7,800	7,800	7,800	30,100
Fringe Benefits	1,005	1,170	1,170	1,170	4,515
Insurance	1,450	1,450	1,450	1,450	5,800
Marketing	700	700	700	700	2,800
Advertising	1,350	2,350	3,000	55	6,755
Supplies	500	500	500	500	2,000
Entertainment	1,200	-	2,000	-	3,200
Contract Labor	3,500	3,500	-	-	7,000
Travel	7,500	7,500	7,500	7,500	30,000
Miscellaneous	1,750	1,750	1,750	1,750	7,000
<b>Totals</b>	<b>29,655</b>	<b>30,720</b>	<b>29,870</b>	<b>24,925</b>	<b>115,170</b>

- 1. Create A New Worksheet** – Insert a new worksheet. Because there is no need to duplicate a template from another worksheet you might be tempted to use the New Sheet button this time; however, this approach does not duplicate the worksheet’s page footers, headers or margin settings. Therefore I would still recommend that you use the CTRL + Drag Tab method as described in examples 1 & 2 above to create a new sheet, and I would then eliminate the data on the new sheet by deleting those columns that contain data.
- 2. Label** – As before, label the new worksheet in Cell A1 and on the Worksheet Tab to read “Consolidated”.
- 3. Select Cell** – Select a blank cell on the new worksheet such as B3.
- 4. Use the Consolidate Command** - From the **Data** tab, select **Consolidate** to display the Consolidate dialog box as pictured below. Click the **Cell Chooser** button, then highlight the data only on **Dept A**, click **Enter**, and then click **Add**. Repeat this process for **Dept B**, **Dept C** and **Dept D**.



5. Check the check boxes to use Labels in the **Top Row** and **Left Column**.
6. **Finish** – Click **OK** to produce the results.

	A	B	C	D	E	F	G
1		<b>Consolidated</b>					
2							
3			<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	
4		<b>Rent</b>	14,500	14,500	14,500	14,500	
5		<b>Salaries</b>	24,600	24,800	24,800	24,800	
6		<b>Fringe Benefits</b>	1,005	1,170	1,170	1,170	
7		<b>Insurance</b>	2,680	2,150	2,150	2,150	
8		<b>Marketing</b>	1,000	1,000	1,000	1,000	
9		<b>Advertising</b>	1,350	2,350	3,000	55	
10		<b>Supplies</b>	1,460	1,460	1,460	1,460	
11		<b>Equipment</b>	3,240	1,230	679	4,500	
12		<b>Client Gifts</b>	500	500	500	500	
13		<b>Cell Phones</b>	1,250	1,250	1,250	1,250	
14		<b>Entertainment</b>	3,205	1,660	4,830	1,800	
15		<b>Contract Labor</b>	7,050	7,050	50	50	
16		<b>Travel</b>	24,500	24,500	24,500	24,500	
17		<b>Air Fare</b>	4,000	4,000	5,000	2,300	
18		<b>Hotels</b>	2,300	1,450	3,000	2,030	
19		<b>Miscellaneous</b>	5,350	5,350	5,350	5,350	
20							
21							

7. **Add Totals and Formatting** - Highlight your data and expand the selection to include a blank bottom row and blank right column. Click the **AutoSum** tool, add formatting and you are done.

	A	B	C	D	E	F	G
1		<b>Consolidated</b>					
2							
3			<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Totals</b>
4		<b>Rent</b>	14,500	14,500	14,500	14,500	58,000
5		<b>Salaries</b>	24,600	24,800	24,800	24,800	99,000
6		<b>Fringe Benefits</b>	1,005	1,170	1,170	1,170	4,515
7		<b>Insurance</b>	2,680	2,150	2,150	2,150	9,130
8		<b>Marketing</b>	1,000	1,000	1,000	1,000	4,000
9		<b>Advertising</b>	1,350	2,350	3,000	55	6,755
10		<b>Supplies</b>	1,460	1,460	1,460	1,460	5,840
11		<b>Equipment</b>	3,240	1,230	679	4,500	9,649
12		<b>Client Gifts</b>	500	500	500	500	2,000
13		<b>Cell Phones</b>	1,250	1,250	1,250	1,250	5,000
14		<b>Entertainment</b>	3,205	1,660	4,830	1,800	11,495
15		<b>Contract Labor</b>	7,050	7,050	50	50	14,200
16		<b>Travel</b>	24,500	24,500	24,500	24,500	98,000
17		<b>Air Fare</b>	4,000	4,000	5,000	2,300	15,300
18		<b>Hotels</b>	2,300	1,450	3,000	2,030	8,780
19		<b>Miscellaneous</b>	5,350	5,350	5,350	5,350	21,400
20		<b>Totals</b>	<b>97,990</b>	<b>94,420</b>	<b>93,239</b>	<b>87,415</b>	<b>373,064</b>
21							

**Comments:**

- **Row Descriptions** - Note that the consolidation works only to the extent that the different worksheets contain the same row descriptions. If your four department heads had used the descriptions: **Rent**, **Rent Exp.**, **Rent Expense**, and **Rental Expense**, then those rows would not actually be consolidated, rather they would be shown as four separate rows in the resulting consolidation. However, because all four department heads did use the phrase Rent to describe that row, the four respective rent rows were properly consolidated.
- **Account Numbers** – As an option, you might insert account numbers to the left of the row descriptions to consolidate dissimilar information which contains dis-similar row descriptions.
- **To Update** – To update the results, place your cursor in the upper left hand corner of the Consolidation range, and rerun the **Consolidate** command. If the resulting report is a different size, you may need to clean up your data and reapply totals.

- **Consolidate Different Workbooks** – Excel can also consolidate data from different workbooks. The procedure is exactly the same except that you use the **Browse** button instead of the **Cell Chooser** button to point to your data ranges.

### The Problem with Data Consolidate

The problem with Data Consolidate occurs when you attempt to change the source data, for example when you insert a new row in Dept A; a comedy of errors ensues as follows:

1. When you change the source data, the consolidated report does not update automatically.
2. Pressing the Refresh button does nothing.
3. To update the consolidated report, you must rerun the data consolidate command. But upon re-running this command, you find that your cursor needs to be in the exact same location when you ran it last time.
4. You also find that you need to erase the previous data before re-running the Data Consolidate command.
5. Next you find that in Excel 2003, 2007 and 2010, you need to re-adjust your consolidating range for Dept A because the tool did not automatically expand the selection when the row was inserted in Dept A. (This issue has been corrected in Excel 2013.)

Because source data tends to change frequently, you are probably better off using the next method to consolidate your data - the **PivotTable and Chart Wizard** method.

## D. Using A PivotTable To Consolidate Dissimilar Similar Data

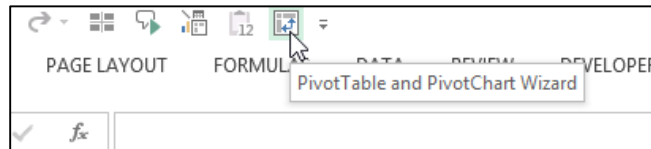
The workbook below contains the same dis-similar budget data used in example 3 above. The four worksheets contain budgets for separate departments, and some budgets contain more rows and different row descriptions than others. The goal is to consolidate these four departmental budgets using the PivotTable approach.

	Q1	Q2	Q3	Q4	Total
Rent	4,000	4,000	4,000	4,000	16,000
Salaries	6,700	7,800	7,800	7,800	30,100
Fringe Benefits	1,005	1,170	1,170	1,170	4,515
Insurance	1,450	1,450	1,450	1,450	5,800
Marketing	700	700	700	700	2,800
Advertising	1,350	2,350	3,000	55	6,755
Supplies	500	500	500	500	2,000
Entertainment	1,200	-	2,000	-	3,200
Contract Labor	3,500	3,500	-	-	7,000
Travel	7,500	7,500	7,500	7,500	30,000
Miscellaneous	1,750	1,750	1,750	1,750	7,000
<b>Totals</b>	<b>29,655</b>	<b>30,720</b>	<b>29,870</b>	<b>24,925</b>	<b>115,170</b>

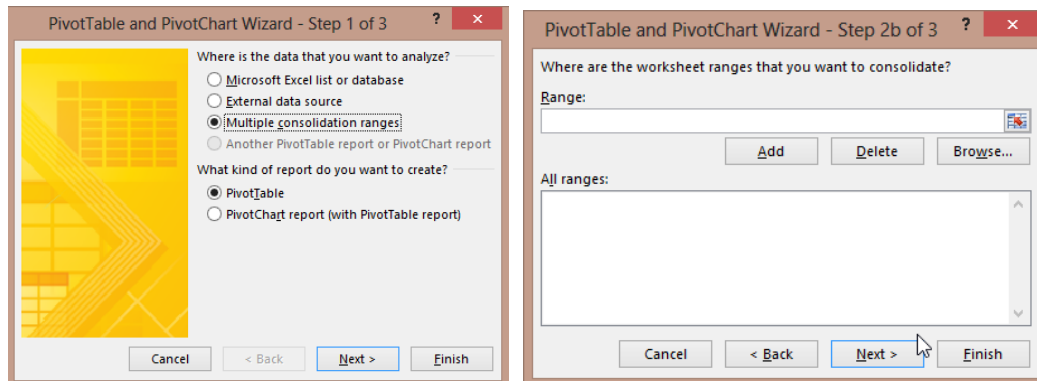
- 1. Create A New Worksheet** – Start by inserting a new worksheet. (Because there is no need to duplicate a template from another worksheet you might be tempted to use the New Sheet button this time; however, this approach does not duplicate the worksheet's page footers, headers or margin settings. Therefore I would still recommend that you use the CTRL + Drag Tab method as described in examples 1 & 2 above to create a new sheet, and I would then eliminate the data on the new sheet by deleting those columns that contain data.)
- 2. Label** – Label the new worksheet in Cell A1 and on the Worksheet Tab to read **Consolidated**.
- 3. Select Cell** – Select a blank cell such as B3.
- 4. Add the PivotTable Wizard to Your Quick Access Toolbar** – The PivotTable Wizard in Excel 2003 allows you to pivot multiple consolidation ranges, but for unknown reason this tool is hidden in later versions of excel. Therefore, in Excel 2013, 2010 and 2007, you must first customize your Quick Access toolbar and insert the icon titled **PivotTable and PivotChart Wizard** as shown below.



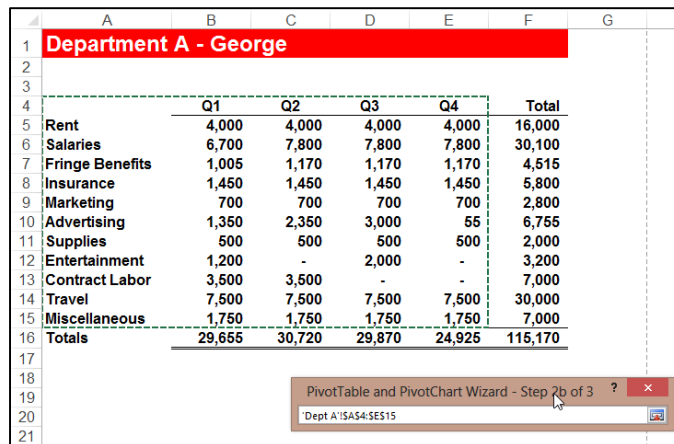
To add this tool, right-click your **Quick-Access** toolbar, select **Customize Quick Access Toolbar**, select the option to **View All Commands**, locate the **PivotTable and PivotChart Wizard** icon and add it to your toolbar. The resulting toolbar will appear as follows. .



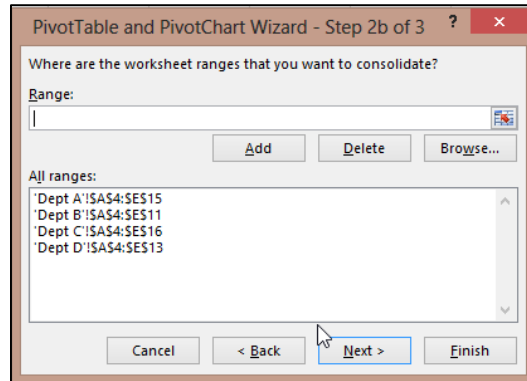
5. **Run the PivotTable Wizard** – Click the **PivotTable and PivotChart Wizard** icon to display the PivotTable and PivotChart Wizard dialog box as shown below. Choose the **Multiple consolidation ranges** option and click Next, and Next again. The dialog box on the right should now be displayed.



Click the Cell Chooser button, then highlight the **data only** on Dept A, click “Enter”, and then click “Add”.



Repeat this process for Dept B, C and D until the PivotTable Wizard appears as follows.



6. **Finish** – Click “FINISH” to produce the results.

	A	B	C	D	E	F	G
1		Page1	(All)				
2							
3		<b>Sum of Value</b>	<b>Column Labels</b>				
4		<b>Row Labels</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Grand Total</b>
5		Advertising	1350	2350	3000	55	6755
6		Air Fare	4000	4000	5000	2300	15300
7		Cell Phones	1250	1250	1250	1250	5000
8		Client Gifts	500	500	500	500	2000
9		Contract Labor	7050	7050	50	50	14200
10		Entertainment	3205	1660	4830	1800	11495
11		Equipment	3240	1230	679	4500	9649
12		Fringe Benefits	1005	1170	1170	1170	4515
13		Hotels	2300	1450	3000	2030	8780
14		Insurance	2680	2150	2150	2150	9130
15		Marketing	1000	1000	1000	1000	4000
16		Miscellaneous	5350	5350	5350	5350	21400
17		Rent	14500	14500	14500	14500	58000
18		Salaries	24600	24800	24800	24800	99000
19		Supplies	1460	1460	1460	1460	5840
20		Travel	24500	24500	24500	24500	98000
21		<b>Grand Total</b>	<b>97990</b>	<b>94420</b>	<b>93239</b>	<b>87415</b>	<b>373064</b>
22							

7. **Add Formatting** - Highlight your data and add comma formatting with no decimals, adjust the columns widths to taste, center the column headings; then you are done.

	A	B	C	D	E	F	G
1		Page1	(All)				
2							
3		<b>Sum of Value</b>	<b>Column Labels</b>				
4		<b>Row Labels</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Grand Total</b>
5		Advertising	1,350	2,350	3,000	55	6,755
6		Air Fare	4,000	4,000	5,000	2,300	15,300
7		Cell Phones	1,250	1,250	1,250	1,250	5,000
8		Client Gifts	500	500	500	500	2,000
9		Contract Labor	7,050	7,050	50	50	14,200
10		Entertainment	3,205	1,660	4,830	1,800	11,495
11		Equipment	3,240	1,230	679	4,500	9,649
12		Fringe Benefits	1,005	1,170	1,170	1,170	4,515
13		Hotels	2,300	1,450	3,000	2,030	8,780
14		Insurance	2,680	2,150	2,150	2,150	9,130
15		Marketing	1,000	1,000	1,000	1,000	4,000
16		Miscellaneous	5,350	5,350	5,350	5,350	21,400
17		Rent	14,500	14,500	14,500	14,500	58,000
18		Salaries	24,600	24,800	24,800	24,800	99,000
19		Supplies	1,460	1,460	1,460	1,460	5,840
20		Travel	24,500	24,500	24,500	24,500	98,000
21		<b>Grand Total</b>	<b>97,990</b>	<b>94,420</b>	<b>93,239</b>	<b>87,415</b>	<b>373,064</b>
22							

### Comments:

The **PivotTable Wizard** approach is superior to the **Data Consolidate** approach for many reasons as follows:

1. Totals are automatic inserted with the PivotTable method.
2. Total column and row labels are automatically inserted with the PivotTable method.
3. AutoFilter buttons are automatic inserted with the PivotTable method.
4. If the source data changes, such as inserting a new row in Dept A, simply click refresh to update.
5. The resulting PivotTable is drillable.
6. The resulting PivotTable can be pivoted.
7. The PivotTable report offers many PivotTable tools such as PivotTable formatting which Data Consolidate does not offer.

Download these Consolidation example templates at:

[www.CarltonCollins.com/consolidatesimilarbudgets.xlsx](http://www.CarltonCollins.com/consolidatesimilarbudgets.xlsx)

[www.CarltonCollins.com/consolidatedissimilarbudgets.xlsx](http://www.CarltonCollins.com/consolidatedissimilarbudgets.xlsx)

## Data Analysis Tools

### Preparing Data for Data Analysis

Before you start to analyze data using Excel's various data commands such as **Sort**, **Autofilter**, **Subtotal**, **Grouping**, **Consolidate**, or **PivotTable**, you should first inspect your data to determine if it is in **Analysis-Ready** condition. In general, this means that the data must meet the following criteria:

- Contiguous Data** – The data should contain no blank rows or blank columns. For example, the screen below shows blank rows (with solid lines). These rows should first be removed before proceeding with the creation of a PivotTable.

	A	B	C	D	E	F	G	H	I	J	K		
1		02/02/2003 16:08	<b>GENERAL LEDGER TRANSACTIONS BY DATE ENTERED</b>								Page 1 of 3		
2			<b>01/01/2003 - 02/02/2003 23:59:59</b>										
3													
4													
5													
6			<b>Batch</b>	<b>Date</b>	<b>Account</b>	<b>Account Description</b>	<b>Debit</b>	<b>Credit</b>	<b>Description</b>	<b>Source</b>	<b>Reference</b>	<b>Cum Debit</b>	<b>Cum Credit</b>
7			<b>02/02/2003 3:09:26 AM</b>										
8			03020210001	01/05/2003	2-1200	Accounts Payable		25.00	Vendor Bill WATERK DEC-02		WATERCO	0.00	25.00
9			03020210001	01/05/2003	6-2940	Water	25.00		Water Bill For Dec -1 DEC-02		WATERCO	25.00	25.00
10			<b>02/02/2003 3:10:47 AM</b>										
11			03020210002	01/04/2003	2-1200	Accounts Payable		130.00	Vendor Bill TELCO - T-Dec-02		TELCO	0.00	130.00
12			03020210002	01/04/2003	6-2910	Telephone	130.00		Telephone Bill Dec C T-Dec-02		TELCO	130.00	130.00
13			<b>02/02/2003 3:10:12 AM</b>										
14			03020210003	01/05/2003	2-1200	Accounts Payable		1,470.50	Vendor Invoice ACC VI-900002		ACCESS	0.00	1,470.50
15			03020210003	01/05/2003	1-1300	Inventory	67.50		64MB 800MHz NON VI-900002		ACCESS	67.50	1,470.50
16			03020210003	01/05/2003	1-1300	Inventory	319.00		INTEL PENTIUM 4 1.1 VI-900002		ACCESS	386.50	1,470.50
17			03020210003	01/05/2003	1-1300	Inventory	4.00		Keyboard PS/2 BTC VI-900002		ACCESS	390.50	1,470.50
18			03020210003	01/05/2003	1-1300	Inventory	1,080.00		HP XE3 P3 1.06G 1E VI-900002		ACCESS	1,470.50	1,470.50
19			<b>02/02/2003 3:19:28 AM</b>										
20			03020210004	02/02/2003	2-1200	Accounts Payable		450.00	Vendor Bill CARREP VBILLS-1002		CARREP	0.00	450.00
21			03020210004	02/02/2003	6-2410	Vehicles, Mach. & Equipment	450.00		Vehicles, Mach. & E VBILLS-1002		CARREP	450.00	450.00
22			<b>02/02/2003 3:20:48 AM</b>										
23			03020210005	01/03/2003	2-1200	Accounts Payable		160.00	Vendor Bill ELECTRI E-Dec-02		ELECTRIC	0.00	160.00
24			03020210005	01/03/2003	6-2930	Electricity	160.00		Electricity Bill Dec -1 E-Dec-02		ELECTRIC	160.00	160.00
25			<b>02/02/2003 3:20:48 AM</b>										
26			<b>02/02/2003 3:20:48 AM</b>										
27			<b>02/02/2003 3:20:48 AM</b>										
28			<b>02/02/2003 3:20:48 AM</b>										
29			<b>02/02/2003 3:20:48 AM</b>										
30			<b>02/02/2003 3:20:48 AM</b>										

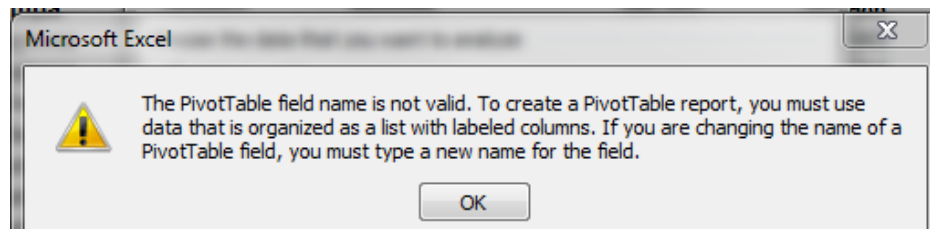
- Single Row Data** – Some accounting systems produce data that spans two or more rows per transaction. If this is the case, your will need to clean that data so that all related information for a single transaction or data is contained on a single row. For example, the following data contains multiple rows of data related to a single sales order. In this case, the user must move and paste the data to fall on a single row. This is an example of data that requires a great deal of clean up.

Item	T Part Number	Description	Site	Total CD	Total Ord	Total Inv	Total Rarvd	Total Bk	Total Ord	Total Ship	Need	On Ord	Unit Cost						
ComponentControl.com																			
Emp# DBA		Cust PO# P340595		Customer: ABJ Aviation Corporation				Company Code: AAC4		Class Code: ISO-Y									
Order # 100022		Order Date: 10/1/2002		Due Date: 10/15/2002															
3 E	005-01064-0075	SWITCH,ROCKER TYPE		NE	1	0	1	0		10/15/2002	0	104	0.00						
1 S	005-02012-0023	POSITIONER		NE	1	0	1	0		10/15/2002	0	8	2,500.00						
2 S	005-02044-0003	BLACK BEZEL		AR	1	0	1	0		10/15/2002	0	0	1,357.61						
Ordered SubTotal:				4,905.01				Open SubTotal:		4,905.01		Billable SubTotal:		4,905.01		Profit SubTotal:		1,040.00	
Emp# PIETR		Cust PO# S3892		Customer: ACRU Hardware Company				Company Code: AHC1		Class Code: ISO-Y									
Order # 100074		Order Date: 10/2/2002		Due Date: 10/20/2002															
1 E	005-01082-0058	EMERGENCY EVACUATION SLIDE		SV	1	0	1	0			0	0	0.00						
2 S	010-06500	MASTER CYLINDER		OH	1	0	1	0			0	0	760.00						
Ordered SubTotal:				3,450.00				Open SubTotal:		3,450.00		Billable SubTotal:		3,450.00		Profit SubTotal:		2,690.00	
Emp# JOANN		Cust PO# 980		Customer: American Component L.L.C.				Company Code: ACLL1		Class Code: ISO-Y									
Order # 100379		Order Date: 10/2/2002		Due Date: 10/2/2002															
1 S	005-01082-0058	EMERGENCY EVACUATION SLIDE		SV	1	0	1	0		10/2/2002	0	0	950.00						
Ordered SubTotal:				1,989.66				Open SubTotal:		1,989.66		Billable SubTotal:		1,989.66		Profit SubTotal:		1,039.66	
Emp# DBA		Cust PO#		Customer: ABC Aerospace Incorporated				Company Code: AAJ2		Class Code: ISO-Y									

- c. **Column Headers** - The data should contain a unique header atop each column. For example, the following screen contains two columns labeled **Date**, while columns D and E contain no heading. These are both cases of data that should be cleaned before creating a PivotTable.

	A	B	C	D	E	F	G	H
1	Year	Date	Date			State	Attendance	Type
2	2010	10	5-Oct	Tech Savvy CPA		Acworth, GA	GA	13 Course
3	2009	6	3-Jun	Excel Advanced		Alpharetta, GA	GA	19 Course
4	2011	11	9-Nov	QuickBooks for CPAs		Alpharetta, GA	GA	33 Course
5	2010	12	14-Dec	Communicating with Computers		Buckhead, GA	GA	29 Course
6	2010	6	10-Jun	Excel Functions, Macros and Data		Buckhead, GA	GA	29 Course
7	2010	9	24-Sep	Microsoft Office 2010 and Windows		Buckhead, GA	GA	0 Course
8	2010	6	8-Jun	Excel Hands On		Cobb Galleria, GA	GA	8 Course
9	2010	5	20-May	Accounting Software Expo		Atlanta, GA	GA	100 Conferen
10	2010	4	30-Apr	Property Management Conference		Atlanta, GA	GA	100 Conferen
11	2010	8	18-Aug	SEAS Conference		Atlanta, GA	GA	100 Conferen
12	2009	8	13-Aug	Excel Functions		Birmingham, AL	AL	63 Course
13	2009	9	8-Sep	Information Security		Birmingham, AL	AL	24 Course
14	2009	7	15-Jul	QuickBooks for CPAs		Birmingham, AL	AL	45 Course
15	2009	7	16-Jul	Tech Savvy CPA		Birmingham, AL	AL	42 Course
16	2010	4	23-Apr	Communicating with Computers		Bloomington, MN	MN	20 Course
17	2009	4	29-Apr	Excel for Intermediate		Bloomington, MN	MN	46 Course

If you attempt to analyze data that does not contain a column heading atop all columns, you will sometimes receive an error message, such as the example shown below.



If you have data with the same column heading used more than once, Excel will sometimes alter the column headings, for example when you create a PivotTable, so all headings will be unique.

- d. **Row Descriptions** – Generally, your data should repeat row descriptions for each row. For example, the screen below shows that the state and city descriptions are not repeated for each row in columns A & B.

	A	B	C	D	E	F	G	H
3	<b>Carlton's Rental Properties</b>							
4	<b>2012 Analysis</b>							
5								
6	<b>State</b>	<b>City</b>	<b>Type</b>	<b>Manager</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Profit</b>	<b>Vacancy Rate</b>
7	Florida	Daytona	Duplex	Steve	75,254	58,698	16,556	25.5%
8			Duplex	Steve	77,184	87,218	(10,034)	56.4%
9			Duplex	Steve	77,184	68,694	8,490	25.5%
10			Duplex	Steve	76,219	60,213	16,006	54.4%
11			Townhome	Steve	52,140	41,191	10,949	35.6%
12			Townhome	Steve	52,800	59,664	(6,864)	25.5%
13			Townhome	Steve	52,140	41,191	10,949	27.6%
14			Triplex	Ginger	110,772	94,156	16,616	39.8%
15			Triplex	Ginger	121,198	112,714	8,484	45.0%
16			Triplex	Ginger	121,198	112,714	8,484	23.3%
17		Tampa	Apartment	Ginger	128,563	119,564	8,999	39.8%
18			Apartment	Ginger	217,504	184,878	32,626	53.3%
19			Duplex	Steve	79,114	64,873	14,240	25.5%

A solution for quickly filling in the missing row descriptions is presented later in these materials.

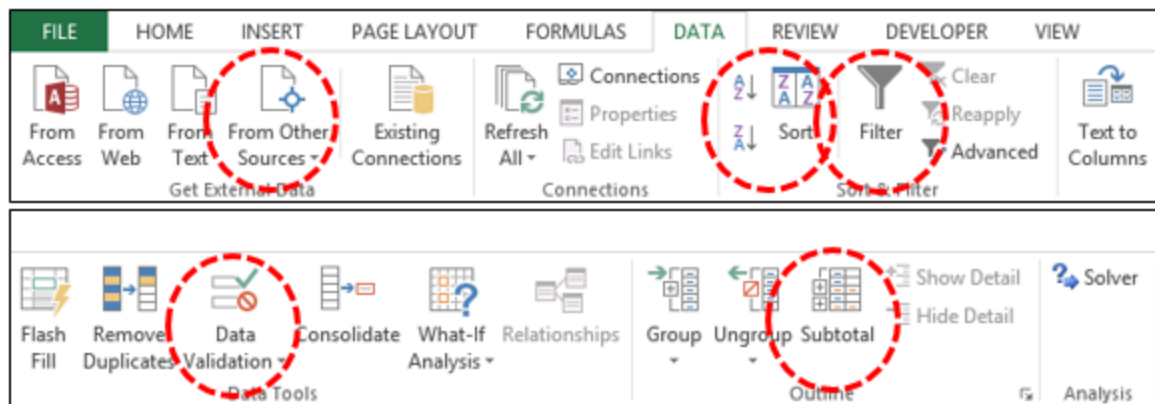
- e. **Transposing Headers and Rows** – In some cases, data may need to be transposed because many of Excel's Data tools use the column headings, not the row headings to crunch the data. To do this, copy the data, then select **Paste Special, Transpose, OK** to flip the data around.
- f. **Clean Data** – The data must be clean of empty text cells containing spaces, special characters, extra spaces within data, trailing spaces, trailing zeros, leading zeros, etc.

## Data Analysis Tools

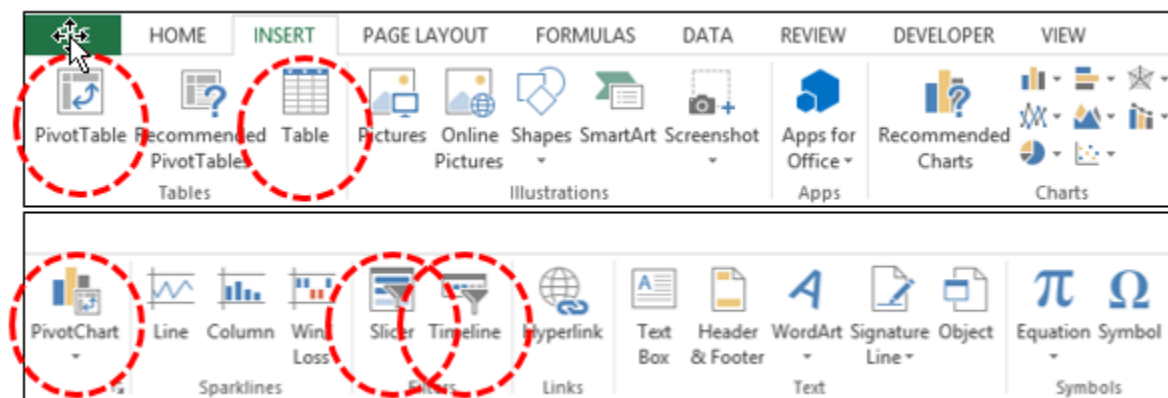
Excel provides specialized tools for analyzing data and generating financial reports, yet most CPAs are unaware of these tools or haven't tried using them before. Specifically useful are the **Subtotaling, Grand Totaling, Filtering, Consolidating, Grouping & Outlining, Drilling, OLAP Data Cubes, PivotTables, Sparklines, Data Bar Reporting, Conditional Formatting, Charting, Foot Notes and End Notes, Formula Auditing Tools, Error Checking, Functions, and Data Analysis Tools.**

The concepts discussed are intended to directly aid the CPA in summarizing, slicing, dicing and analyzing data, and generating related financial reports.

### 2013 Data Ribbon:



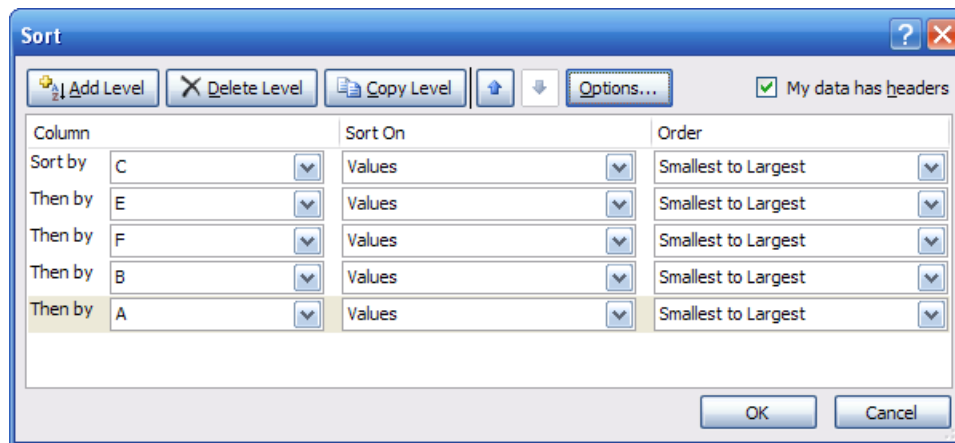
### 2013 Insert Ribbon:



## Data Sort

You would think that every Excel user would already know all about sorting data in Excel, but I am frequently surprised to find that many users have missed a few key points related to using this tool. I don't mean to belittle you or talk beneath you, but humor me a copy of paragraphs and let's make sure you are fully up to speed on the following key sorting points:

1. **Contiguous Data** - The "A to Z" sorting tool can sort a large matrix of data without having to highlight the area as long as the data is contiguous; that is to say that your data should contain no blank columns, no blank rows, and the columns must all be labeled with a column heading. When data is contiguous, all you need to do is place your cursor in a single cell in a given column and click the **Sort A to Z** or **Sort Z to A** buttons, and Excel will automatically select the entire matrix for sorting. Surprisingly many users waste a great deal of time highlighting sort ranges prior to sorting, but this step is often unnecessary.
2. **A to Z Button** - Simply place the cursor in the desired column for sorting, and press the A to Z or Z to A button as the case may be. Excel will automatically sort all continuous columns that have headings and all contiguous rows from the top row under the heading labels down to the last row in the selected column that contains data. *(Note - If you accidentally select 2 cells instead of just one, your results will not be correct.)*
3. **Sort by 64 Columns** - The "Sort" tool was enhanced beginning in Excel 2007 as it now provides the ability to sort by up to 64 columns, instead of just 3 columns. Presented below is a dialog box which shows this expanded functionality.

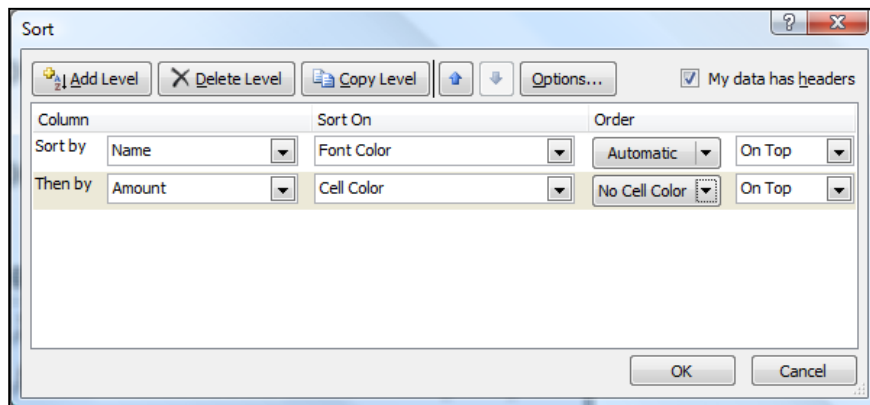


4. **Sort Left to Right** – Excel has always provided the ability to sort left to right. To do so, select the **Sort Options** box in the **Sort** dialog box and click the check box labeled **Sort Left to Right** as pictured below.



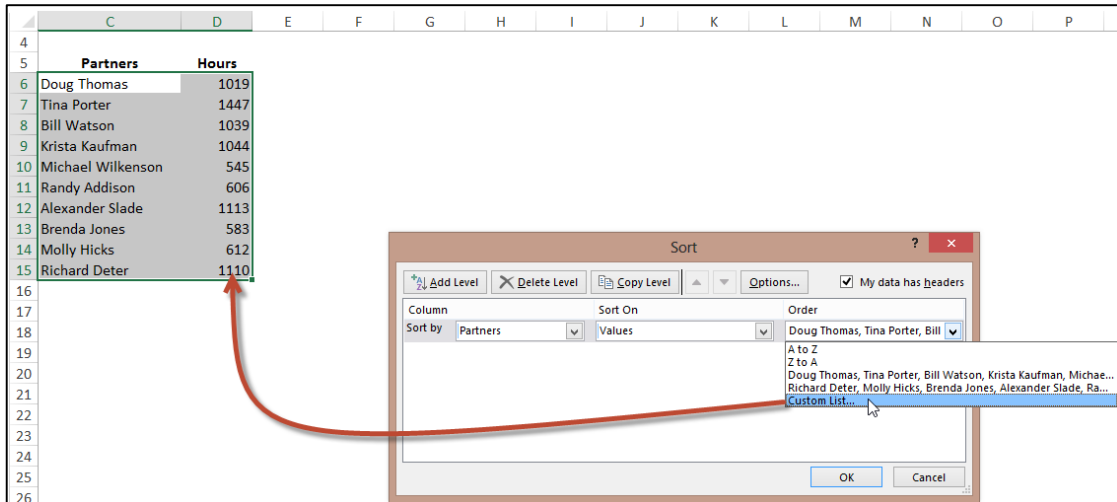


5. **Sort by Color** – beginning with Excel 2007, you can also sort by font color or by cell color, or both. This is handy in many ways. Sometimes CPAs use color to tag or mark certain cells - and later find it useful to be able to sort by those markings. In other situations CPAs use conditional formatting to apply color to cells using a wide variety of rules; and thereafter they can sort the data based on the resulting conditional colors. The two sort-by-color options are pictured below.



To be fair, it was sort of possible to sort by color in Excel 2003. To accomplish this task, you needed to use the **CELL** function in order to identify information about a given cell such as the cell color or font color. Thereafter, the results of that function could be used to sort rows – which effectively means that you can sort by color in Excel 2003 – but it takes a bit more effort.

6. **Sort By Custom List** – Another sorting capability in Excel is the ability to sort by **Custom List**. For example, assume a CPA firm has ten partners, and the Managing partner prefers to be shown at the top of the list, and the remaining Partners based on seniority. In this case, you could create a Custom List in the Excel Options dialog box listing the partners in the desired order, and then sort future reports based on that order.



To access the Custom List settings:

1. In Excel 2013 & 2010, select **File, Options, Advanced**, and scroll to the bottom, and then select **Edit Custom List**.
2. In Excel 2007, select **File, Options**, select **Edit Custom List** option a few inches down from the top.
3. In Excel 2003, select **Tools, Options**, and click the **Custom Lists** tab.

## Filtering Data

AutoFilter allows you to view a subset of your data and when you are done, you can clear the filters to once again redisplay all of your data. To use this tool, start with any list of data and turn on the AutoFilter tool. Then position your cursor in the column you want to filter and use the drop down arrows to apply your filters as suggested in the screen below.

Carlton's Rental Properties 2014 Analysis								
Manage	State	City	Type	Revenue	Expense	Profit	Vacancy Rate	Police Visits
Billy			Apartment	47,520	45,619	1,901	24.7%	6
Billy			Triplex	91,463	72,256	19,207	35.6%	8
Billy			Apartment	356,040	259,909	96,131	25.5%	2
Billy			Triplex	154,276	143,477	10,799	65.0%	9
Billy			Apartment	113,924	93,417	20,506	25.5%	6
Billy			Triplex	94,936	77,848	17,089	31.5%	9
Billy			Apartment	90,305	70,438	19,867	25.5%	6
Billy			Triplex	394,276	366,677	27,599	15.4%	0
Billy			Apartment	116,122	84,769	31,353	13.4%	3
Billy			Apartment	92,621	82,433	10,188	18.7%	3
Billy			Triplex	69,466	66,687	2,779	54.4%	9
Billy			Apartment	261,005	221,854	39,151	23.3%	6
Billy			Triplex	57,024	54,743	2,281	56.4%	8
Ginger			Triplex	181,988	205,646	(23,658)	43.2%	2
Ginger			Triplex	121,198	112,714	8,484	15.4%	4
Ginger			Apartment	432,900	367,965	64,935	24.7%	2
Ginger			Apartment	96,768	70,641	26,127	31.8%	2

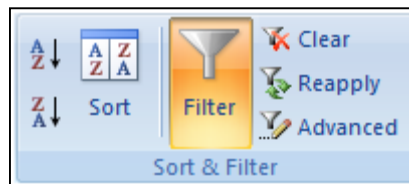
Once the filters are applied, you will see a subset of your data. For example, the screen presented below shows filtered data for only Macon and Savannah properties.

Carlton's Rental Properties 2014 Analysis									
Manage	State	City	Type	Revenue	Expense	Profit	Vacancy Rate	Police Visits	
25	Ginger	Georgia	Macon	Apartment	128,563	119,564	8,999	39.8%	8
26	Ginger	Georgia	Macon	Apartment	128,563	119,564	8,999	23.3%	1
27	Ginger	Georgia	Savannah	Apartment	76,032	75,272	760	65.0%	0
64	Steve	Georgia	Macon	Townhome	52,800	46,992	5,808	18.7%	9
65	Steve	Georgia	Macon	Duplex	76,219	60,213	16,006	26.5%	7
66	Steve	Georgia	Macon	Duplex	75,254	58,698	16,556	35.6%	5
67	Steve	Georgia	Macon	Apartment	296,700	216,591	80,109	23.3%	1
118	Jim	Georgia	Macon	Triplex	82,427	62,444	19,983	53.3%	1
121	Jim	Georgia	Macon	Duplex	90,981	57,088	33,892	27.6%	0
125	Jim	Alabama	Macon	Townhome	60,720	52,504	8,216	25.5%	8
126	Jim	Alabama	Macon	Townhome	59,961	36,248	23,713	35.6%	5

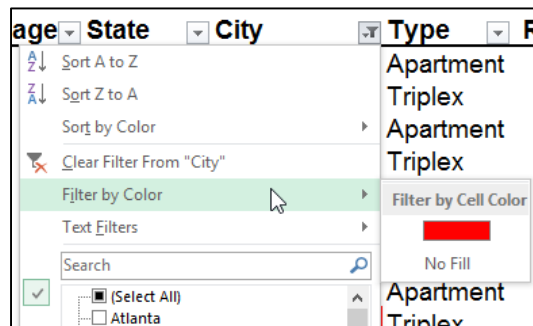
As filters are applied, a small funnel icon appears in the drop down arrow button to indicate that a filter has been applied to that particular column.

**Key Points Concerning the AutoFilter Command:**



1. **Contiguous Data** – The AutoFilter tools works best when you are working with data that is contiguous. In other words, your data should contain no blank columns, no blank rows, and the columns must all be labeled.
2. **Column Headings** –Your columns need unique column headings in and single row, and if the column headings are not in row 1, then the row above the column headings should be blank so Excel will auto detect the correct range.
3. **Filter by Multiple Columns** - You can filter by more than one column.
4. **Filters are Additive** - Each additional filter is based on the current filter and further reduces the subset of data.
5. **Removing Filters** – In all editions of Excel, a fast way to remove multiple filters is to turn **AutoFilter** off and then turn **AutoFilter** back on. In Excel 2007 and later editions, you can also click the **Clear** button in the **Sort & Filter Group** as pictured below.



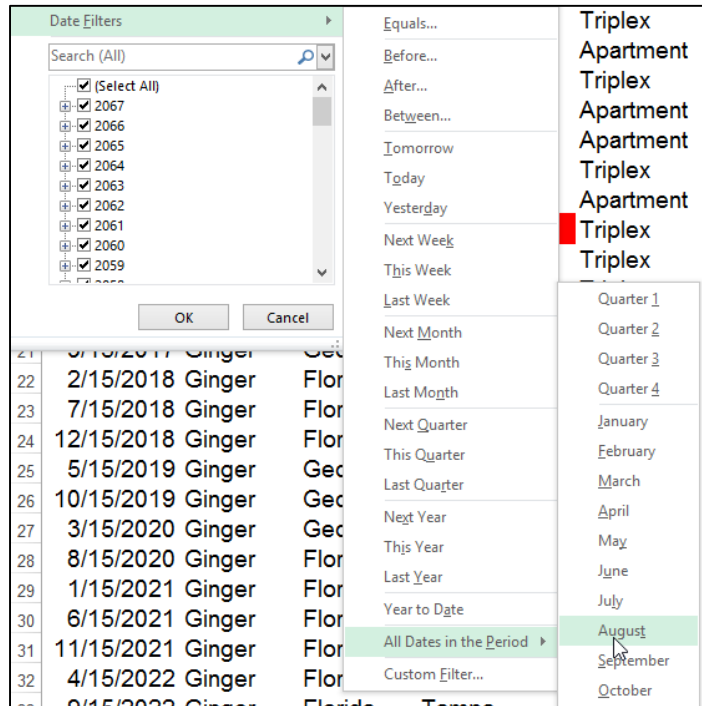
6. **Filter by Color** – You can filter based on colors. For example, you can filter by cell color or by a list of numbers, you can filter by icon or by a custom filter.



Note that the Color Filter is mutually exclusive as you cannot also filter by value or text when filter by color is applied, and vice versa.

7. **Filters Enabled** - A drop-down arrow  means that filtering is enabled but not applied.
8. **Filter Applied** - A Filter button  means that a filter is applied.

9. **Filter Spanning** - The commands under the **All Dates** in the **Date Filters** menu, such as January or Quarter 2 filter by the period no matter what the year. This can be useful, for example, to compare sales by a period across several years.

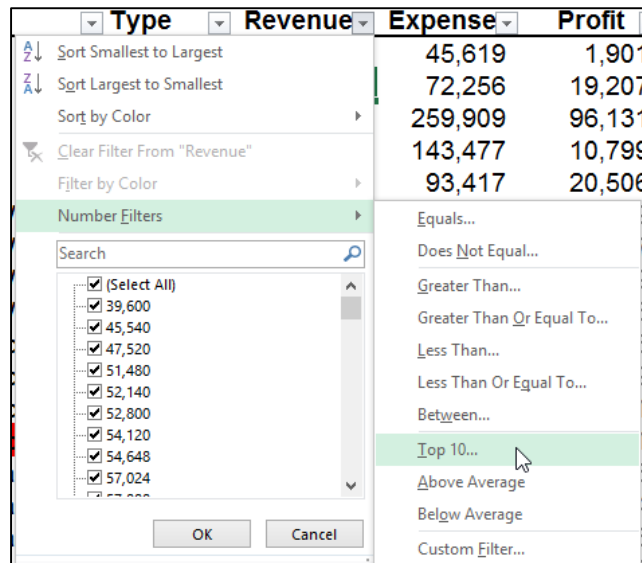


10. **This Year vs. Year-to-Date** - **This Year** and **Year-to-Date** are different in the way that future dates are handled. **This Year** filtering can return dates in the future for the current year, whereas **Year-to-Date** only returns dates up to and including the current date based on the computer's time clock.

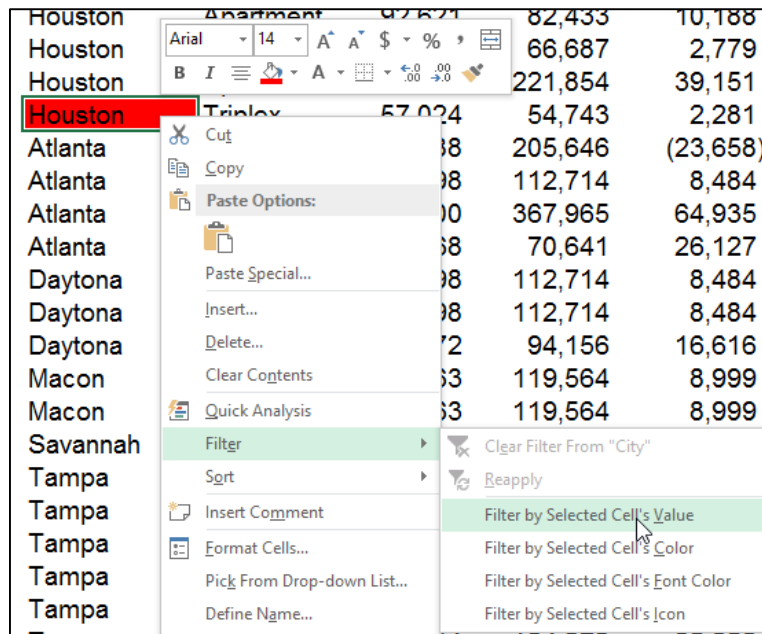
11. **Filtering Dates** - All date filters are based on the Gregorian calendar as decreed by Pope Gregory XIII, after whom the calendar was named, on 24 February 1582. The Gregorian calendar modifies the Julian calendar's regular four-year cycle of leap years as follows: Every year that is exactly divisible by four is a leap year, except for years that are exactly divisible by 100; the centurial years that are exactly divisible by 400 are still leap years. For example, the year 1900 is not a leap year; the year 2000 is a leap year.

12. **Filtering By Days of Week** - If you want to filter by days of the week, simply format the cells to show the day of the week, or insert a new column and use the **WEEKDAY** function to calculate the week day, and then apply filters using this new column.

13. **Top & Bottom Filtering** - On the **Data** tab, in the **Sort & Filter** group, click **Filter**. Point to **Number Filters** and then select **Top 10**. To filter by number, click **Items**. To filter by percentage, click **Percent**. Note - Top and bottom values are based on the original range of cells or table column and not the filtered subset of data.



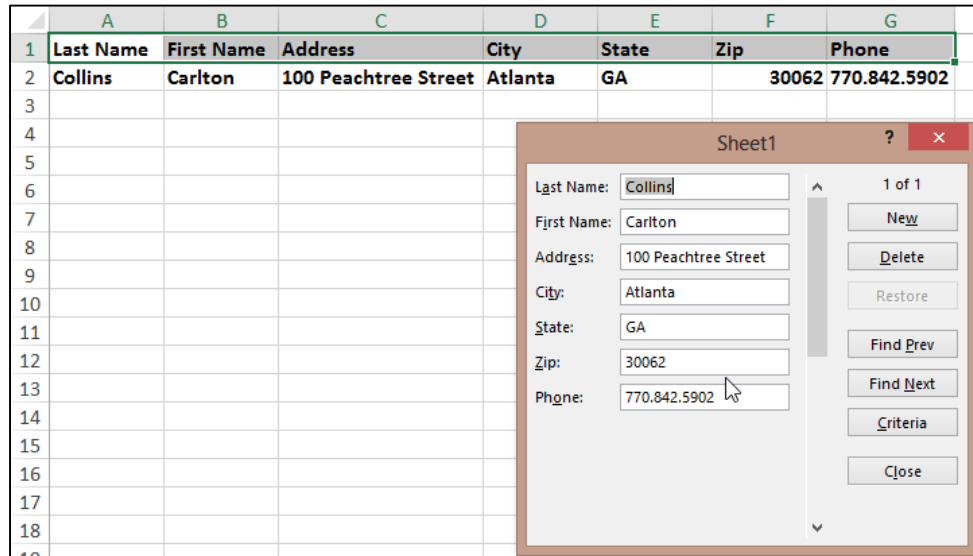
14. **Above & Below Average Filtering** - On the **Data** tab, in the **Sort & Filter** group, click **Filter**. Select **Number Filters, Above/Below Average**. Note – These values are based on the original range of cells or table column and not the filtered subset of data.
15. **Filtering Out Blanks** - To filter out blanks, in the **AutoFilter** menu at the bottom of the list of values, de-select the check box labeled **Blanks**.
16. **Filtering By Color** - Select **Filter by Color**, and then depending on the type of format, select **Filter by Cell Color**, **Filter by Font Color**, or **Filter by Cell Icon**. Note that these filter options only show up when there are actual cell colors, font colors or icons included in the data range.
17. **Filter by Selection** - To filter by text, number, date, time, or color for selected cell(s), select the cells to be used as a filter basis and then right-click that selection, and from the popup menu select **Filter**, **Filter by Selected Cell's Value**, (or **Filter by Selected Cell's Color**, **Filter by Selected Cell's Font Color**, or **Filter by Selected Cell's Icon**).



18. **Refreshing Filters** - To reapply a filter after the data changes, click a cell in the range or table, and then on the **Data** tab, in the **Sort & Filter** group, click **Reapply**.

## Data Form

Excel's Data Form tool provides a data input window which makes Excel look and behave more like a database, such as Microsoft Access. (Note that in Excel 2013, 2010 and 2007, the Form tool button has not been included on the Ribbon, so to use it you will first need to add the Form tool button to the Quick Access Toolbar.)



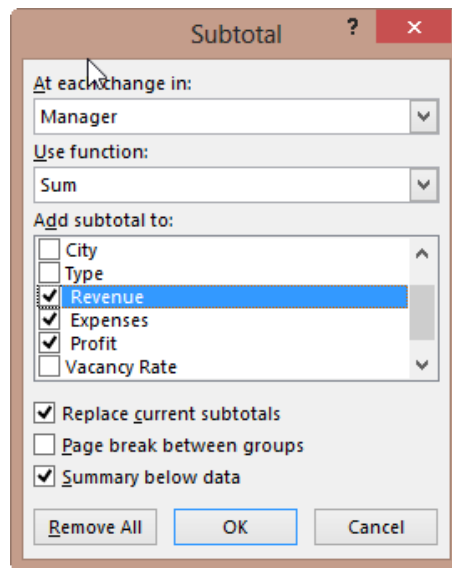
A data form provides a convenient means to enter or display one complete row of information in a range or table without scrolling horizontally. Some people, especially those who are used to using databases, find that using a data form can make data entry easier than moving from column to column when you have more columns of data than can be viewed on the screen.

### Key Points using Data Form:

1. You cannot print data from a data form.
2. Because a data form is a modal dialog box, you cannot use either the Excel Print command or Print button until you close the data form.
3. You might consider using the Windows Print Screen key to make an image of the form, and then paste it into Microsoft Word for printing.

## Data Subtotals

Excel's **Subtotal** command automatically calculates and inserts subtotals and grand totals in your list or table. Once inserted, Excel recalculates subtotal and grand totals as you enter and edit the detail data. The Subtotal command also outlines the list so that you can display and hide the detail rows for each subtotal. Examples of the **Subtotal** dialog box and a resulting subtotaled table are shown below.



Carlton's Rental Properties 2014 Analysis						
Manager	State	Revenue	Expenses	Profit	Police Visits	
<b>Billy Total</b>		1,938,977	1,640,126	298,851	75	
<b>Ginger Total</b>		2,340,914	2,211,002	129,912	78	
<b>Jacob Total</b>		3,128,030	2,763,405	364,625	79	
<b>Kathy Total</b>		1,534,551	1,378,893	155,658	13	
<b>Steve Total</b>		1,679,088	1,439,202	239,886	117	
<b>Erin Total</b>		4,921,875	3,388,993	1,532,882	153	
<b>Jim Total</b>		5,984,923	4,093,049	1,891,874	131	
<b>Ellen Total</b>		1,307,997	818,672	489,325	78	
<b>Grand Total</b>		22,836,355	17,733,341	5,103,014	724	

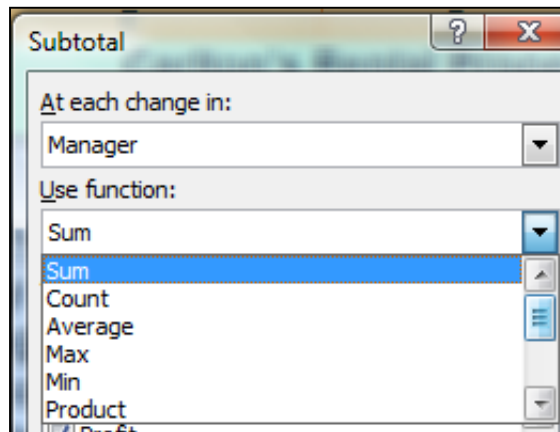
To display subtotals and grand totals at the top instead of the bottom, deselect the checkbox labeled **Summary below data**.

Manager	State	City	Type	Revenue	Expenses	Profit
<b>Grand Total</b>				22,836,355	17,733,341	5,103,014
<b>Billy Total</b>				1,938,977	1,640,126	298,851
Billy	Texas	Dallas	Apartment	47,520	45,619	1,901
Billy	Texas	Dallas	Triplex	91,463	72,256	19,207
Billy	Texas	Dallas	Apartment	356,040	259,909	96,131



**Key points to Consider When Using Subtotaling are as follows:**

1. **Contiguous Data** – The Subtotal tool works best when you are working with data that is contiguous. In other words, your data should contain no blank columns, no blank rows, and the columns must all be labeled.
2. **Sort Before You Subtotal** - You must sort the data by the column you wish to subtotal by, else you will receive erroneous results.
3. **Other Mathematical Applications** - The Subtotal tool not only calculates subtotals, but it can also calculate minimums, maximums, averages, standard deviations, and other functions.



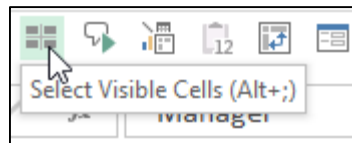
4. **Subtotals in 2013, 2010 & 2007 Tables** – Excel 2007 added a new **Table** tool which enables **Subtotals** a little differently; the Subtotal tool appears at the bottom of each column in each **Table**, as shown in the screen below.

75,254	58,698	16,556	
296,700	216,591	80,109	

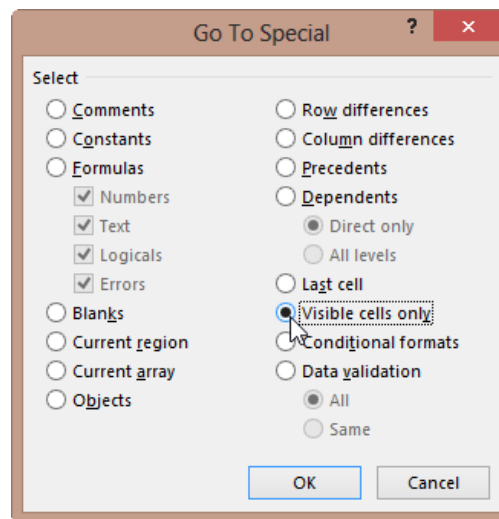
5. **Automatic Outlining** – The **Subtotal** tool automatically inserts **Outlines**, which allows you to collapse or expand your data.

6. **Copying Outline Data** - Some CPAs also like to copy and paste collapsed subtotal data to another location, but they find this process copies and pastes all of the data – not just the summary data they desire. In this situation, there are two ways to achieve a clean copy and paste without grabbing all the hidden data as follows:

- a. **CTRL key** – Hold the **Control Key** down while you individually click to select individual rows; this action will enable you to copy and paste selected data. However, this approach can sometimes be problematic because if you miss-click, you have to start over.
- b. **Select Visible Cells** – A better approach is to use the **Select Visible Cells** tool. This tool will select on the data you can see, after which the copy and paste routine will yield the desired results. This option is better because it is faster and less error prone.



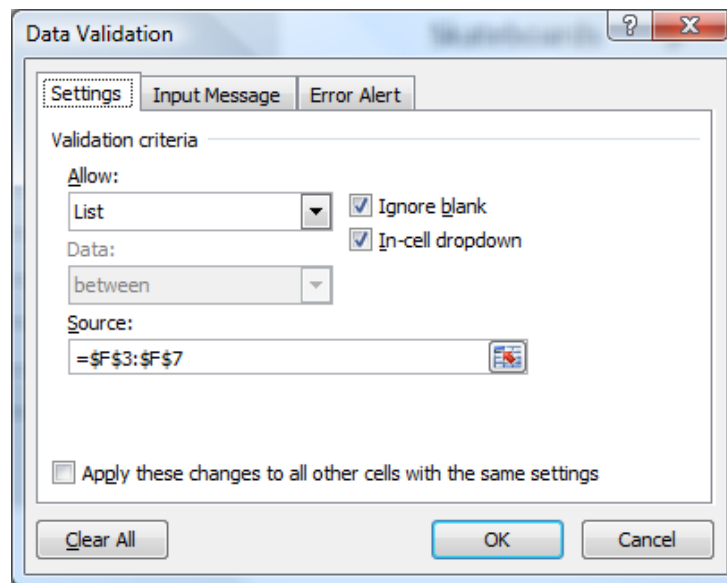
- c. **Go To** – You can also select visible cells using **Go To**. To do this, press **F5** to launch the **Go To** tool and then click **Special**. In the **Go To Special** dialog box, select the radio button labeled **Select Visible cells** and press **OK**.



- d. **ALT + ;** - The **Alt + ;** key combination is the shortcut to using the Select Visible Cells Tool.

## Data Validation

Data Validation can be used to limit the data that can be entered into a cell. For example, you might want the user to enter only values between 1% and 99%. You might also use this tool to enable data input to a drop down list which offers two advantages in that it can be faster and more accurate. To create a dropdown list, enter a list into sequentially cells in Excel. Next, from the **Data** tab select **Data Validation, Data Validation** (yes, again), then in the dialog box (as shown below) select **List** from the **Allow** dropdown box and then indicate the data range for your list in the **Source** box.

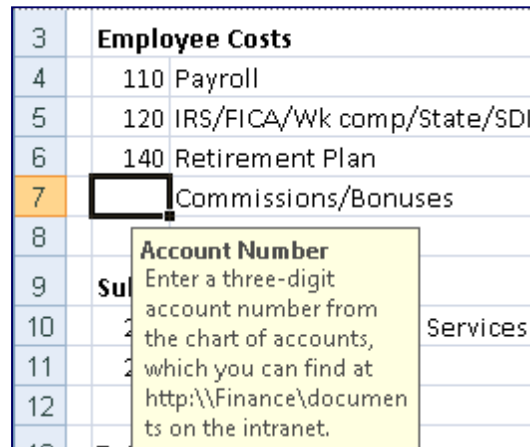


After making all the necessary selections in the validation list dialog box, your worksheet will produce a cell containing a drop down list (shown in cell A10 below) that behaves as shown.

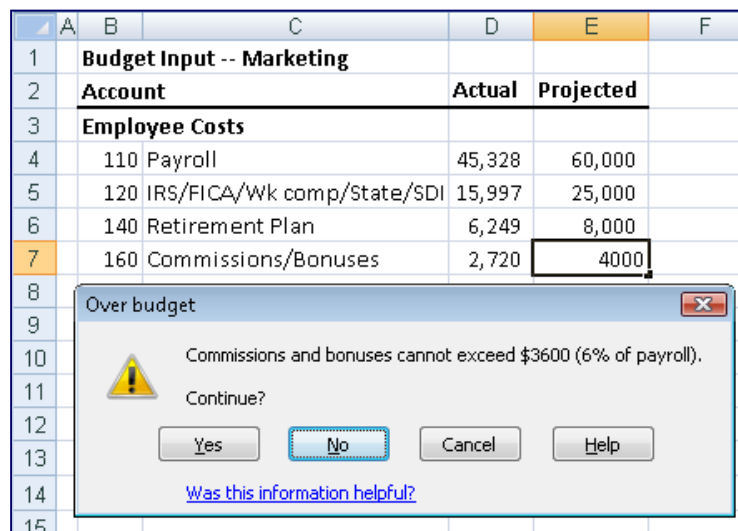
Data Validation - List			
<b>Sales Order Form</b>			
Customer Name	<input type="text"/>		
Address	<input type="text"/>		
Phone	<input type="text"/>		
<b>Item</b>	<b>Quantity</b>	<b>Price</b>	<b>Total</b>
<input type="text"/>			
Bicycles			
Disc Golf Sets			
Kites			
Skateboards			
Surf Boards			
			0

You can also provide messages to define what input you expect for the cell, and instructions to help users correct any errors. For example, on a worksheet, you can set up a cell to allow only

account numbers that are exactly three characters long. When users select the cell, you can show them a message such as this one:



If users ignore this message and type invalid data in the cell, such as a two-digit or five-digit number, you can display an actual error message. In a more advanced scenario, you might use data validation to calculate the maximum allowed value in a cell based on a value elsewhere in the workbook. In the following example, the user has typed \$4,000 in cell E7, which exceeds the maximum limit specified for commissions and bonuses.



If the payroll budget were to increase or decrease, the allowed maximum in E7 would automatically increase or decrease with it.

## Data Table (“What-if Analysis”)

Data tables are part of the collection of what-if analysis commands, which include:

1. Data Tables
2. Goal Seek
3. Scenarios

The **Data Table** command enables the process of changing values in cells to see how those changes will affect the outcome. For example, you can use a data table to vary the interest rate and term length used in a loan to determine possible monthly payment amounts.

There are two types of **Data Tables – One Way** and **Two Way**. A data table cannot accommodate more than two variables. If you want to analyze more than two variables, you should use scenarios. Although it is limited to only one or two criterion (one for the row input cell and one for the column input cell), each criterion can include as many different variable values as you want. (In contrast, a **Scenario** can have a maximum of 32 different criterion, but you can create as many **Scenarios** as you want.)

### Loan Analysis Example

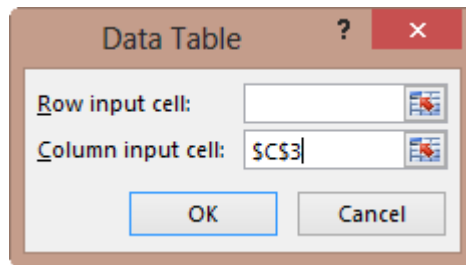
In this exercise, we start by creating a simple Payment function to calculate the payment amount of a loan given a loan amount, interest rate and number of periods.

	A	B	C	D
1	Loan Amount		300,000	
2	Interest rate		6% Per Year	
3	Number of Periods		30 Years	
4	Payment Amount		\$1,798.65	
5				

The next step is to create a **Two-Way Data Table** displaying the resulting payment amount given a variety of lengths of the loan. This process is started by creating a list of the alternative loan amounts, as shown below in **B8, B9, B10**, etc. Cell **C7** must reference the results you want to be displayed in the table.

	A	B	C	D
1	Loan Amount		300,000	
2	Interest rate		6% Per Year	
3	Number of Periods		30 Years	
4	Payment Amount		<u>\$1,798.65</u>	
5				
6				
7			<b>\$ 1,799</b>	
8		1		
9		2		
10		3		
11		4		
12		5		
13		6		
14		7		

Next, highlight the data table range and use the **Data Table** command on the **Data** tab (as shown below) to generate the desired table.

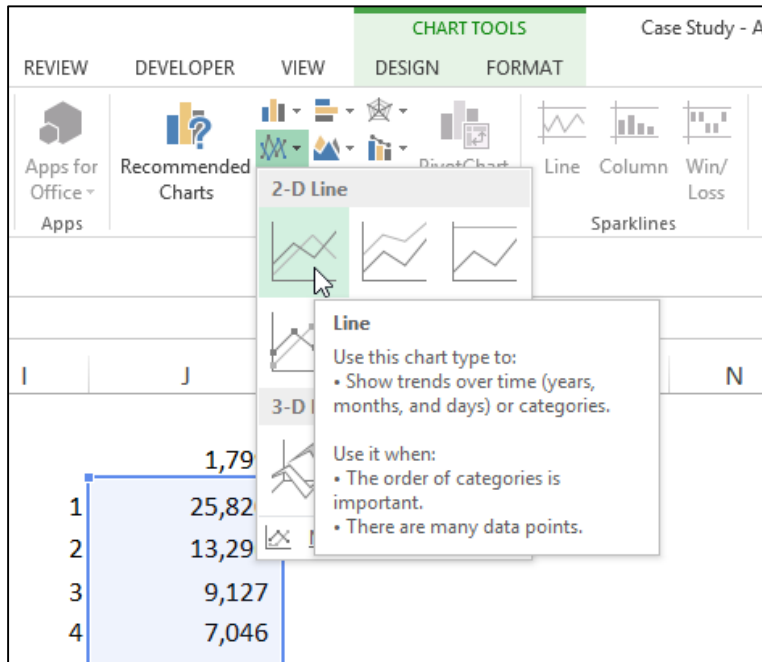


This process will generate the following table:

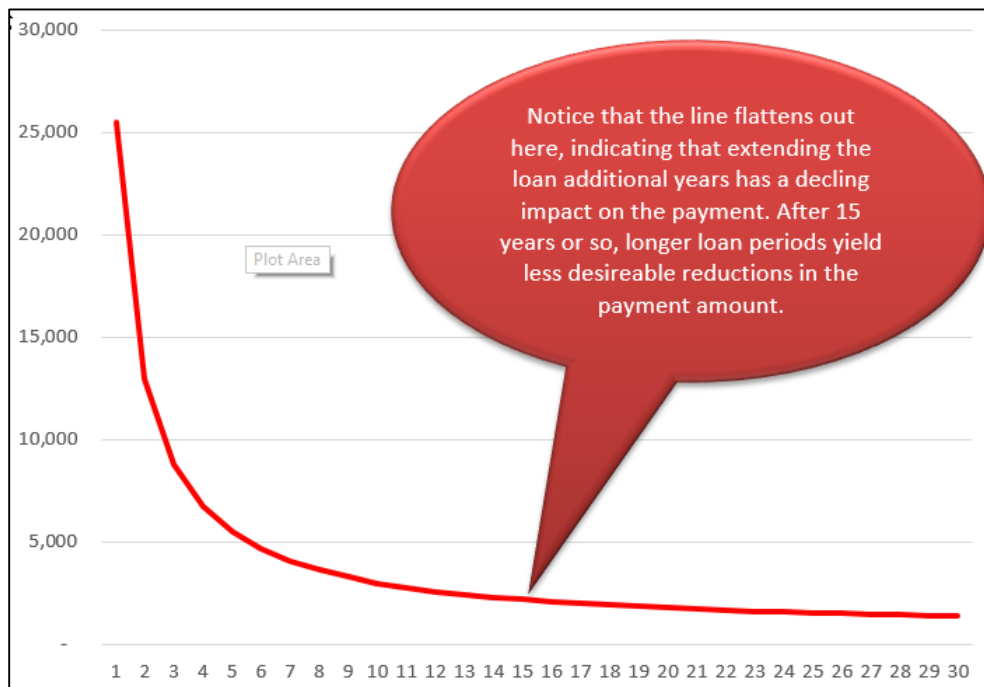
	A	B	C	D
1	Loan Amount		300,000	
2	Interest rate		6% Per Year	
3	Number of Periods		30 Years	
4	Payment Amount		<u>\$1,798.65</u>	
5				
6				
7			\$ 1,799	
8		1	\$ 25,820	
9		2	\$ 13,296	
10		3	\$ 9,127	
11		4	\$ 7,046	
12		5	\$ 5,800	
13		6	\$ 4,972	

This table tells us that the same loan amount will require a monthly payment of \$4,972 to pay the loan off in just 6 years, or a monthly payment of \$5,800 to repay the loan in just 5 years.

The next step in this exercise is to generate a line chart based on the data table we just created. This line chart will provide some interesting observations regarding the benefits and detriments of paying off loans over longer periods.



The resulting chart is shown as follows:



Based on this, no one should ever obtain a fair market loan for more than 15 years, the reduction in payments simply aren't worth the additional length of the loan. This same basic behavior is seen whether the interest rate is 1% or 100%, or whether the loan amount is \$1,000 or \$10,000,000. The only time you might be justified in obtaining a loan longer than 15 years might be when you are extended a favorable interest rate (perhaps from a rich uncle), better than a fair market interest rate.

## Goal Seek

If you know the result that you want from a formula, but are not sure what input values are needed to produce your desired results, use **Goal Seek**. For example, suppose that you have decided to purchase a house, but you don't know how much house you can afford. In this case, know how the interest rate (3.75%) and how long you want to take to pay off the loan (15 years), and the amount you can afford to pay each month (\$2,800). In this case, you can use **Goal Seek** to work backwards to figure out how much house you can afford. Start by calculating the monthly payment based on any random home loan amount as pictured below.

	A	B	C	D	E
1	Loan Amount	300,000			
2	Interest Rate	3.75%	Percent		
3	Duration of Loan	15	Years		
4					
5	Monthly Payment	2,181.67			

Next, from the **Data** tab, select **What-If Analysis, Goal Seek**. Fill in the parameters to set the payment amount to \$2800 by adjusting the Loan Amount, as shown, and then click OK.

	A	B	C
1	Loan Amount	385,027	
2	Interest Rate	3.75%	Percent
3	Duration of Loan	15	Years
4			
5	Monthly Payment	2,800.00	
6			

**Goal Seek** ? x

Set cell:

To value:

By changing cell:

OK Cancel

The result is that a person with \$2,800 available to make monthly payments can afford to purchase a home costing up to \$385,027 (assuming a 15 year loan and 3.75% interest rate) – as pictured above. (Keep in mind that anyone actually following this scenario would need to consider that homes also come with other monthly obligations including real estate taxes, insurance maintenance, etc.)



## Data - Text to Columns

CPAs sometimes receive data from their clients or IT departments that is in text form. When this happens, Excel can split the contents of one or more cells in a column and distribute those contents as individual parts across other cells in adjacent columns. For example, the worksheet below contains a column of full names and amounts that you want to split into separate columns. The **Text to Columns** wizard parses the data automatically into separate cells. To use this tool, select the cell, range or entire column that contains the text values that you want to split.

The screenshot shows the 'Convert Text to Columns Wizard - Step 1 of 3' dialog box. The wizard is open over a worksheet with data in column D. The data is being split into columns E, F, G, and H. The wizard shows 'Delimited' as the chosen file type. A preview of the selected data is shown in the wizard's preview pane.

Row	D	E	F	G	H
178					
179	David Greene,Individual,12.9,1612.5	David Greene	Individual	12.9	1,613
180	Hanson Fish Sales,Corporate,9,1125	Hanson Fish Sales	Corporate	9.0	1,125
181	Hanson Fish Sales,Corporate,2.9,362.5	Hanson Fish Sales	Corporate	2.9	363
182	Willie McClendon,Individual,5,625	Willie McClendon	Individual	5.0	625
183	Willie McClendon,Individual,2.6,325	Willie McClendon	Individual	2.6	325
184	Mindy Simmon,Individual,22,2200	Mindy Simmon	Individual	22.0	2,200
185	Tommy Pruitt,Individual,4,400	Tommy Pruitt	Individual	4.0	400
186	Cascade, Inc.,Corporate,6,600				
187					
188					
189					
190					
191					
192					
193					
194					
195					
196					
197					
198					
199					
200					
201					
202					

### Notes:

1. A range that you want to split can include any number of rows, but it can include no more than one column.
2. You also should make sure there are enough blank columns to the right of the selected column to prevent overwriting existing data in those adjacent columns.

## Flash Fill

Of all the Office 2013 applications, Excel is the beneficiary of the most impressive enhancements. Excel's new **Flash Fill** watches you work and applies logic to help you complete your tasks. The example pictured below contains a list of 44 first and last names in Column A, which I want to separate into Columns B and C. As I start typing the first name of the second record in Column B; Excel's **Flash Fill** guesses what I'm trying to do and offers to fill in the remaining 42 first names (*as shown in grey text*).

	A	B	C	D	E	F
1	<b>President</b>					
2	George Washington	George				
3	John Adams	John				
4	Thomas Jefferson	Thomas				
5	James Madison	James				
6	James Monroe	James				
7	John Quincy Adams	John				
8	Andrew Jackson	Andrew				
9	Martin Van Buren	Martin				
10	William Henry Harrison	William				
11	John Tyler	John				
12	James Polk	James				
13	Zachary Taylor	Zachary				
14	Millard Fillmore	Millard				
15	Franklin Pierce	Franklin				
16	James Buchanan	James				
17	Abraham Lincoln	Abraham				

**After typing in the letter "J" on row 3, Flash Fill guesses that you want to split the remaining names as well, and offers to do this for you.**

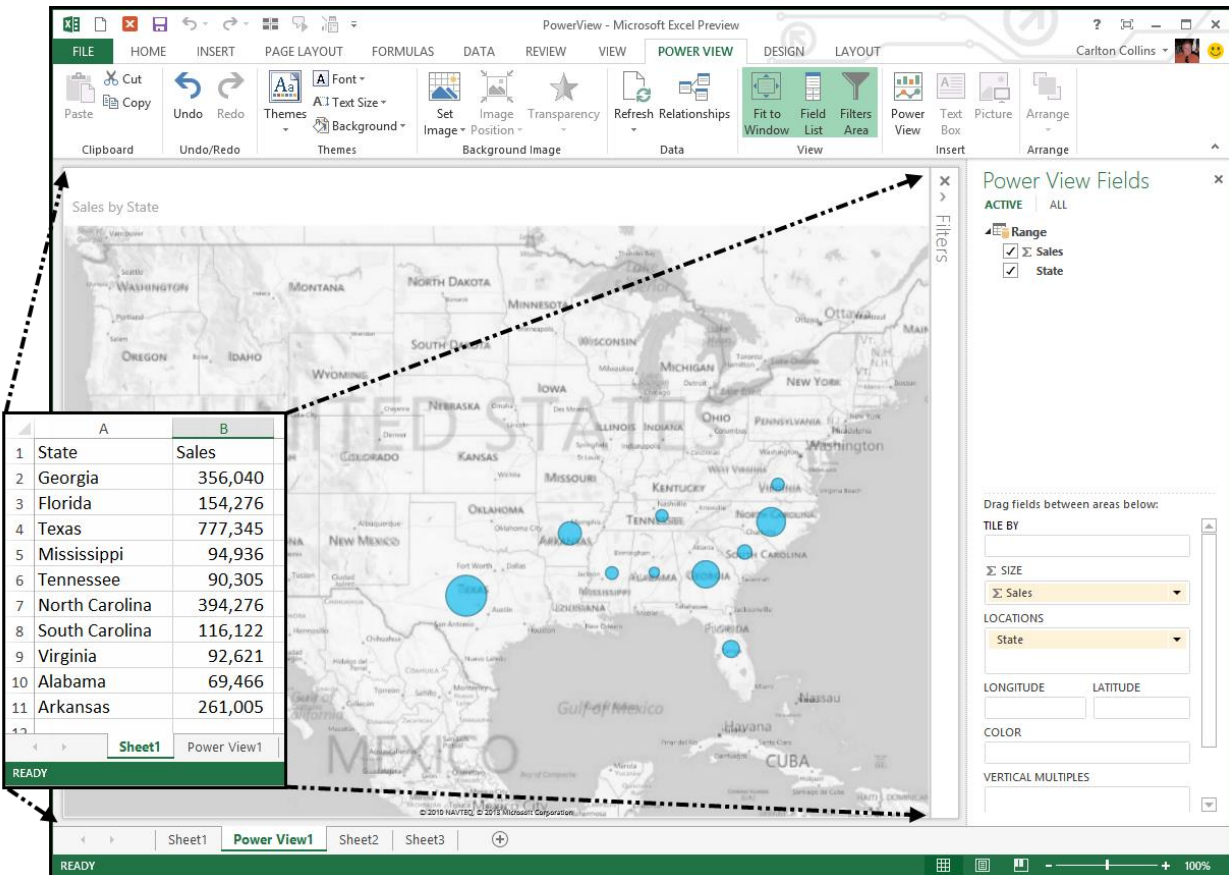
## Data Grouping & Outlining

If you have a list of data that you want to group and summarize, you can create an outline of up to eight levels. Each inner level (represented by a higher number in the outline symbols) displays detailed data for the preceding outer level, represented by a lower number in the outline symbols. Use an outline to quickly display summary rows or columns, or to reveal the detail data for each group. You can create an outline of rows (as shown in the example below), an outline of columns, or an outline of both rows and columns.

	A	C	D	E	F	G
1	<b>Income Statement by Month</b>					
3	Report date: 1/1/2011..12/31/2013					
5	<b>Account</b>	<b>Category</b>	<b>Description</b>	<b>1/31/2011</b>	<b>2/28/2011</b>	<b>3/31/2011</b>
10		Sales Total		(2,047,351)	(2,051,709)	(2,051,413)
15		Service Total		(169,638)	(169,904)	(169,001)
16	000-4130-01	Installation	Installation Charges - West	(13,542)	(13,998)	(14,198)
17	000-4130-02	Installation	Installation Charges - Central	(145,906)	(146,071)	(145,481)
18	000-4130-03	Installation	Installation Charges - East	(282,819)	(283,051)	(283,506)
19	000-4130-04	Installation	Installation Charges - Canada	(87,371)	(88,121)	(88,848)
20		Installation Total		(529,637)	(531,240)	(532,034)
25		Repair Total		(91,793)	(95,030)	(95,322)
30		Sales Discounts Total		328,958	327,865	327,018
35		Trade Discounts Total		146,985	148,012	148,057
40		Sales Returns Total		279,301	277,507	275,729
45		COGS Total		282,104	283,035	282,564
55		Variance Total		3,072	5,746	5,766
64		Salaries Total		260,428	258,616	256,952
69		Insurance Total		29,772	29,782	28,301
75		Depreciation Total		28,467	27,174	28,096
78		Repairs Total		13,106	11,521	11,527

## PowerView

Excel's new **PowerView** inserts new worksheets connected to your data, and then enables you to create new report types, such as the interactive map chart presented below. The resulting PowerView Map report is zoomable, and filters can be applied to display partial data.



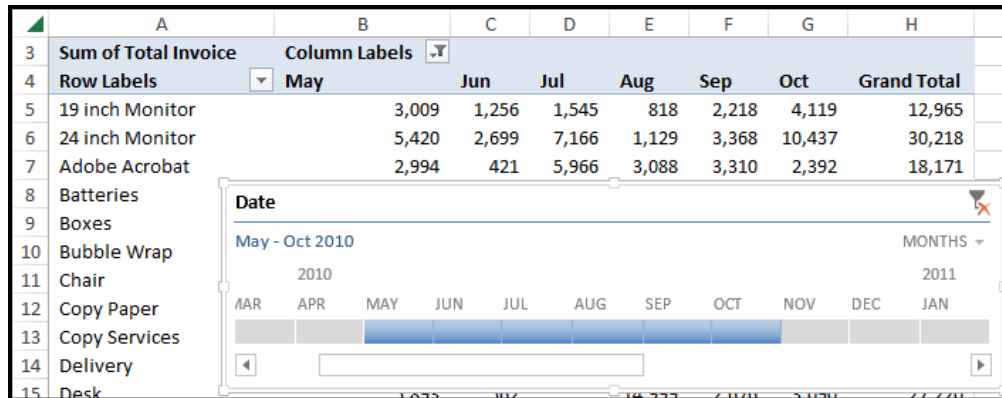
PowerView worksheets can be published as standalone, interactive reports to Microsoft SharePoint's PowerPivot Gallery or other reporting service destinations. Some of the tools provided by PowerView include the ability to create a dashboard containing multiple PowerViews, apply themes and backgrounds, insert pictures and text boxes, insert collapsible and expandable tiles, and add data slicers.

### PowerView Learning Points

1. **Included** - PowerView isn't included in Office Home editions. Power View and PowerPivot are only available in the Office Professional Plus and Office 365 Professional Plus editions.
2. **Worksheet** - PowerView is another sheet in the workbook, and acts like a Dashboard.
3. **Fields** - Add data to the PowerView by selecting fields, much like you do for PivotTables.
4. **Play** - You can play charts to see how they change over time.
5. **PowerView uses PowerPivot** - Known to be extremely fast for retrieving and sorting data.
6. **Relationships** - PowerView can integrate multiple data sets via relationships.

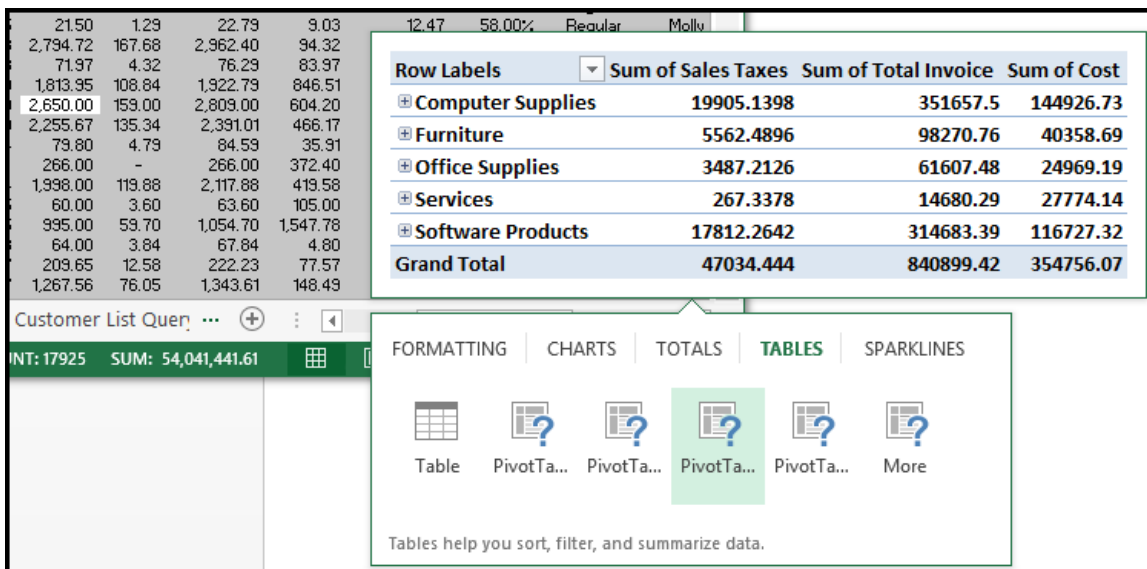
## Timeline Slicer

CPAs who work with PivotTables will likely appreciate Excel's new **Timeline Slicer** which helps users *slice and dice* Pivot data that contain dates. As an example, selecting the dates May through October on the Timeline slicer pictured below adjusts the PivotTable to display May thru October data.



## Quick Analysis

Excel's **Quick Analysis** tool also helps you analyze data by offering a variety of formatting, charts, totals, tables and sparkline layouts to instantly summarize large volumes of data (*see screen below*). When using Quick Analysis to scrutinize text-only data, text specific options for highlighting duplicate or unique text items appear.



## Queries

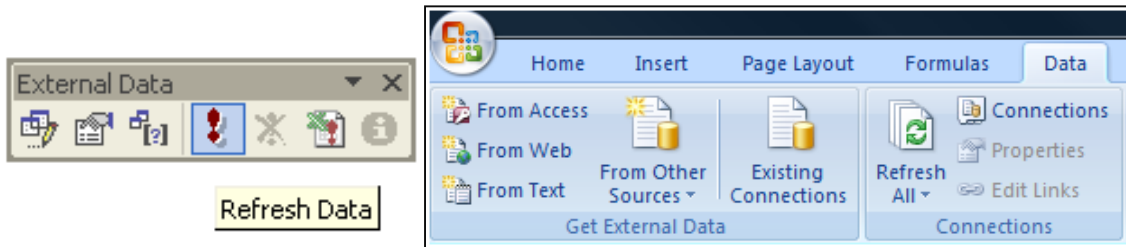
Excel 2010, 2007 & 2003 include pre-designed “queries” that can import commonly used data such as stock quotes for updating a stock portfolio. All you need is a connection to the internet and of course, some stock ticker symbols. In Excel 2010 or 2007 select **Data, Existing Connections, MSN MoneyCentral Stock Quotes** (or in Excel 2003 select **Data, Import External Data, Import Data Existing Connections, MSN MoneyCentral Stock Quotes**) and then walk through the web query wizard for importing stock quotes. In just a few seconds, Excel will retrieve Real-Time data for NYSE, NASDAQ & AMEX, and 20 minute delayed stock prices from other exchanges (during the hours when the stock market is open) and display a grid of complete up-to-date stock price information that is synchronized to the stock market’s changing stock prices. With each click of the “Refresh” button, the stock price information in Excel is updated - this sure beats picking numbers out of the newspaper.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1		Friday, April 24, 2009											
2		11:34:42 AM											
3		<b>Stock Quotes Provided by MSN Money</b>											
4		<a href="#">Click here to visit MSN Money</a>											
5													
6		<a href="#">Microsoft Corp.</a>	<a href="#">Chart</a>	<a href="#">News</a>	Last	Previous Close	High	Low	Volume	Change	% Change	52 Wk High	52 Wk Low
7		<a href="#">Apple Inc.</a>	<a href="#">Chart</a>	<a href="#">News</a>	20.29	18.92	20.45	19.5	66,077,415	1.37	7.24%	32.1	14.87
8		<a href="#">Coca-Cola Co.</a>	<a href="#">Chart</a>	<a href="#">News</a>	124.32	125.4	125.14	123.73	6,275,076	-1.08	-0.86%	192.24	78.2
9		<a href="#">United Parcel Service Inc.</a>	<a href="#">Chart</a>	<a href="#">News</a>	42.87	42.92	43.09	42.71	3,205,193	-0.05	-0.12%	61	37.44
10		<a href="#">International Business Machines Corp.</a>	<a href="#">Chart</a>	<a href="#">News</a>	53.48	53.33	54.04	52.53	2,533,150	0.15	0.28%	74.14	37.99
11		<a href="#">Wal-Mart Stores Inc.</a>	<a href="#">Chart</a>	<a href="#">News</a>	100.33	101.42	101.97	100.09	2,665,080	-1.09	-1.07%	130.93	69.5
12					48.73	48.86	49.56	48.51	8,042,577	-0.13	-0.27%	63.85	46.25

**Completing the Stock Portfolio** – Next link the grid data to another worksheet, and insert new columns containing the number of shares owned, as well as an additional column to compute the total value based on shares owned, as shown below.

	A	B	C	D	E	F	G	H	I	J	K	L	
1		Friday, April 24, 2009											
2		11:40:17 AM											
3		<b>Stock Quotes Provided by MSN Money</b>											
4													
5													
6		<a href="#">Microsoft Corp.</a>			Last	Shares Owned	Current Value	Previous Close	High	Low	Volume	Change	% Change
7		<a href="#">Apple Inc.</a>			20.29	13,500	273,915	18.92	20.45	19.5	66077415	1.37	0.0724
8		<a href="#">Coca-Cola Co.</a>			124.32	2,400	298,368	125.4	125.14	123.73	6275076	-1.08	-0.0086
9		<a href="#">United Parcel Service Inc.</a>			42.87	12,000	514,440	42.92	43.09	42.71	3205193	-0.05	-0.0012
10		<a href="#">International Business Machines Corp.</a>			53.48	1,780	95,194	53.33	54.04	52.53	2533150	0.15	0.0028
11		<a href="#">Wal-Mart Stores Inc.</a>			100.33	2,800	280,924	101.42	101.97	100.09	2665080	-1.09	-0.0107
12					48.73	8,300	404,459	48.86	49.56	48.51	8042577	-0.13	-0.0027
							1,867,300						

**Refreshing the Stock Prices** - Once you have created your portfolio, simply click the Refresh Data button on the “External Data” Toolbar in Excel 2003 or on the “Data Ribbon” in Excel 2010 & 2007 shown below to update the current value of your Portfolio.

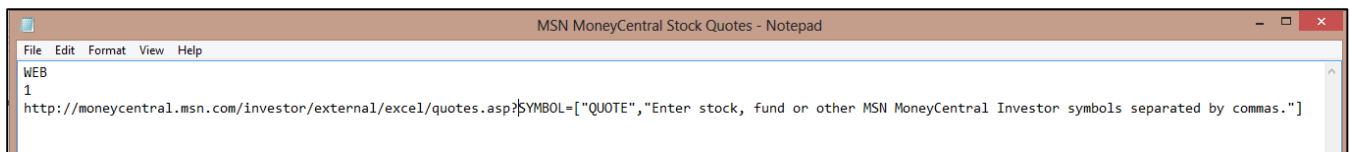


**Query Parameters** - There are numerous options to help you extract exactly the data you want the way you want it. The “Web Query Parameters Box”, “Web Query Options box” and “External Data Properties Box” provide numerous options for controlling your web query.

### Excel 2013 Stock Quote Queries

In Excel 2013, for unknown reasons Microsoft has removed the stock quote query option, therefore below are instructions for restoring this option.

1. Launch Notepad (**Start, Programs, Windows Accessories, Notepad**)
2. Enter the following information exactly:

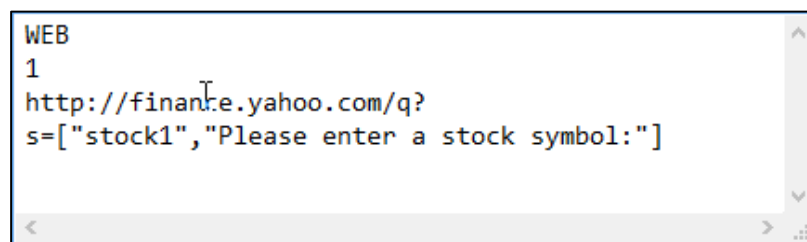


### Web

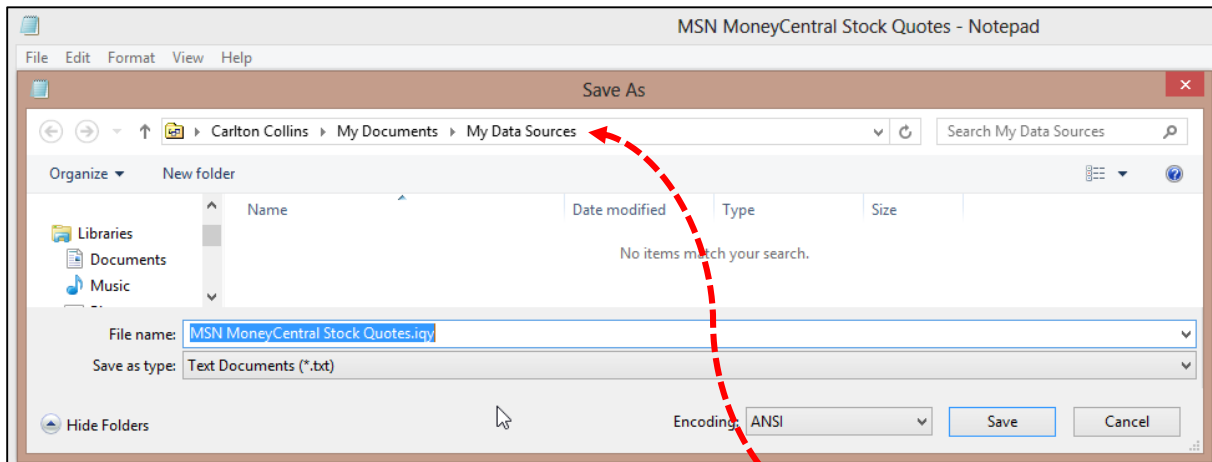
1

**[http://moneycentral.msn.com/investor/external/excel/quotes.asp?SYMBOL=\[\"QUOTE\", \"Enter stock, fund or other MSN MoneyCentral Investor symbols separated by commas.\"\]](http://moneycentral.msn.com/investor/external/excel/quotes.asp?SYMBOL=[\)**

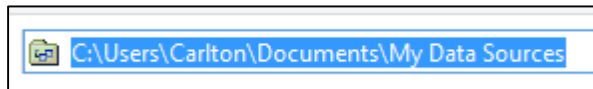
Or if you prefer, use this to query Yahoo’s stock prices:



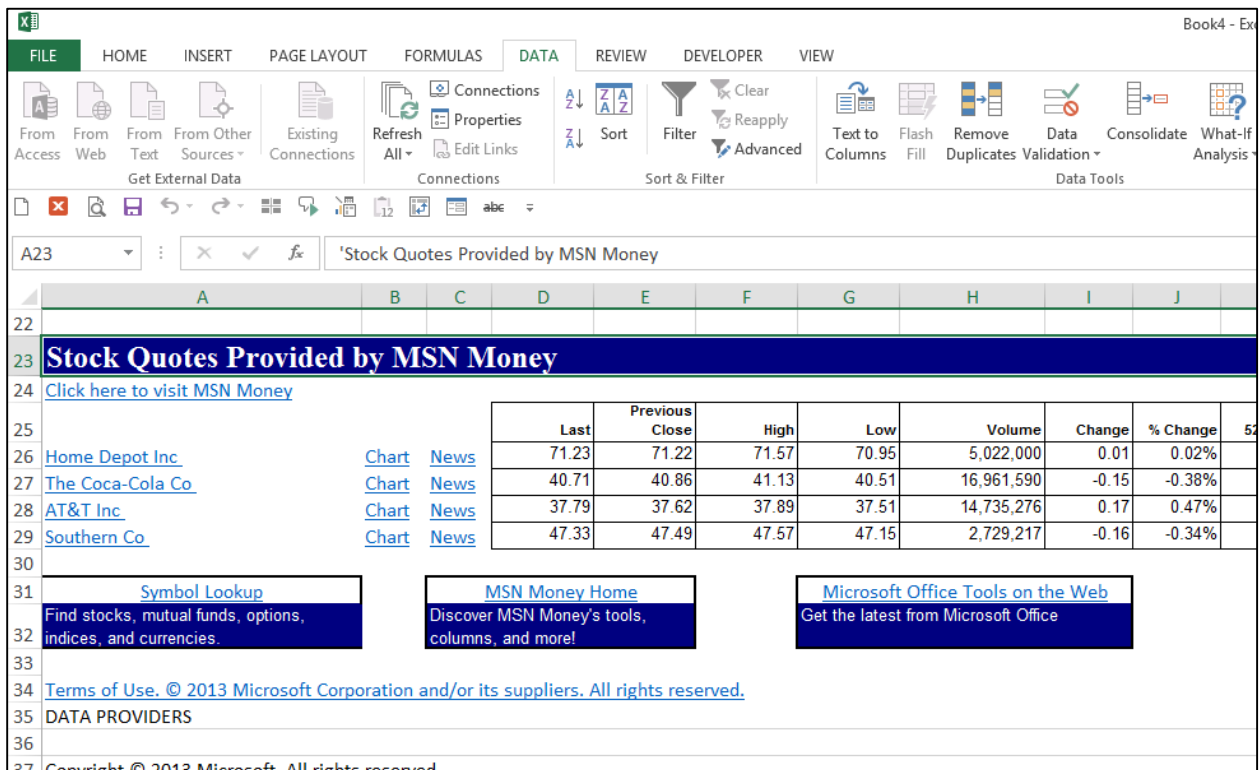
- Save the file using any name you want, but be sure to include the extension **.igy** as pictured.



- Make sure to save this file to the folder labeled **My Data Sources**.



- Now in Excel, from the **Data** tab select **Existing Queries**, then scroll to and launch the new query you just created – it should work just like it did in Excel 2010, 2007 and 2003.





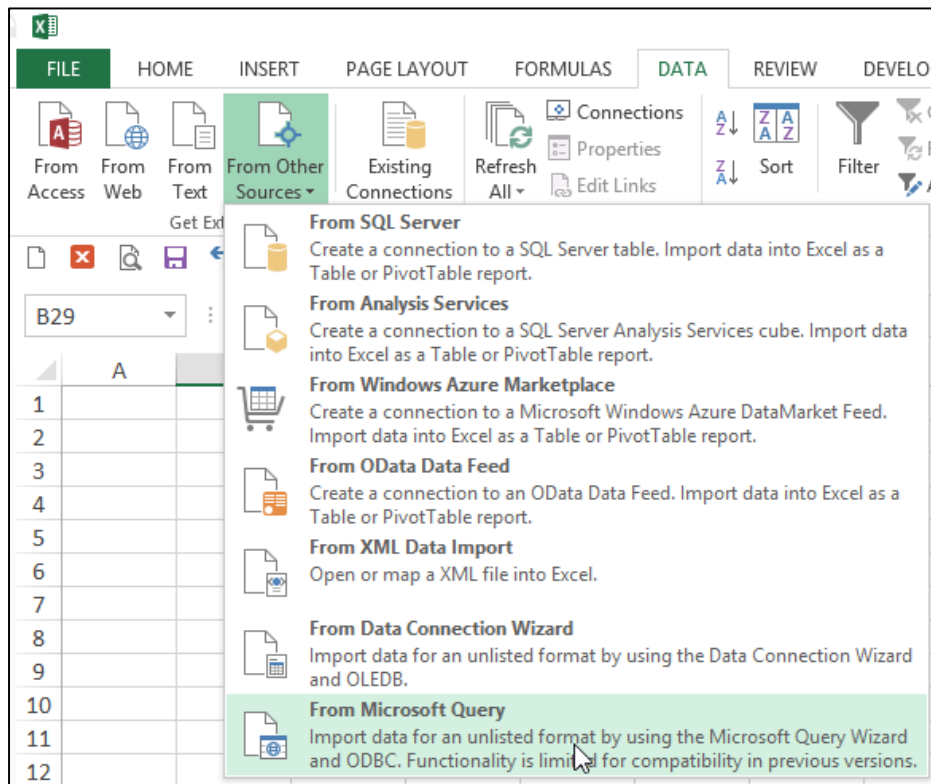
## Database Queries

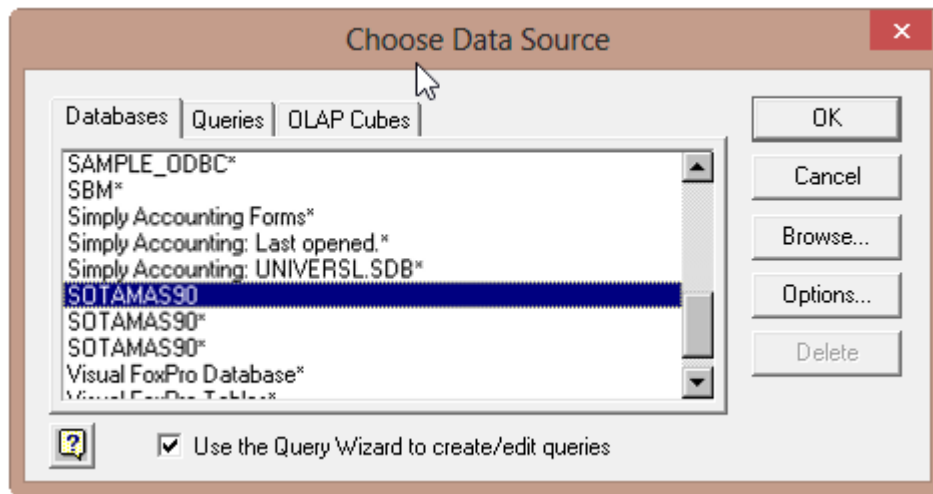
Microsoft Excel can also query and retrieve data you want from an external data source. For example, you can retrieve Microsoft Excel data about a specific product by region. You can create a simple query by using the Query Wizard, or you can create a more complex query by using the advanced features of Microsoft Query.

To use Microsoft Query to retrieve external data, you must:

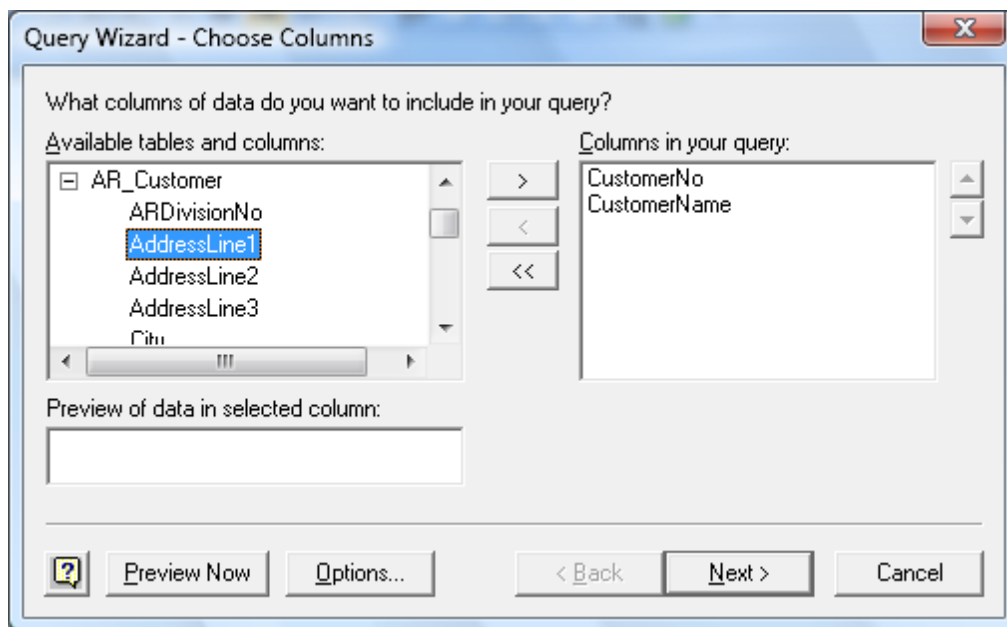
1. **Have access to an external data source** - If the data is not on your local computer, you may need to see the administrator of the external database for a password, user permission, or other information about how to connect to the database.
2. **Install Microsoft Query** - If Microsoft Query is not available, you might need to install it.
3. **Specify a source to retrieve data from, and then start using Microsoft Query** - For example, if you want to insert database information, display the Database toolbar, click Insert Database, click Get Data, and then click MS Query.

For example, suppose we have some data in our accounting system – Sage MAS 200 ERP that we would like to analyze in Excel. We can use the Database Query Wizard to build a query that will extract the data we need and place it in an Excel spreadsheet, as follows.





The first step is to select the type of database you want to query and to select the specific database.

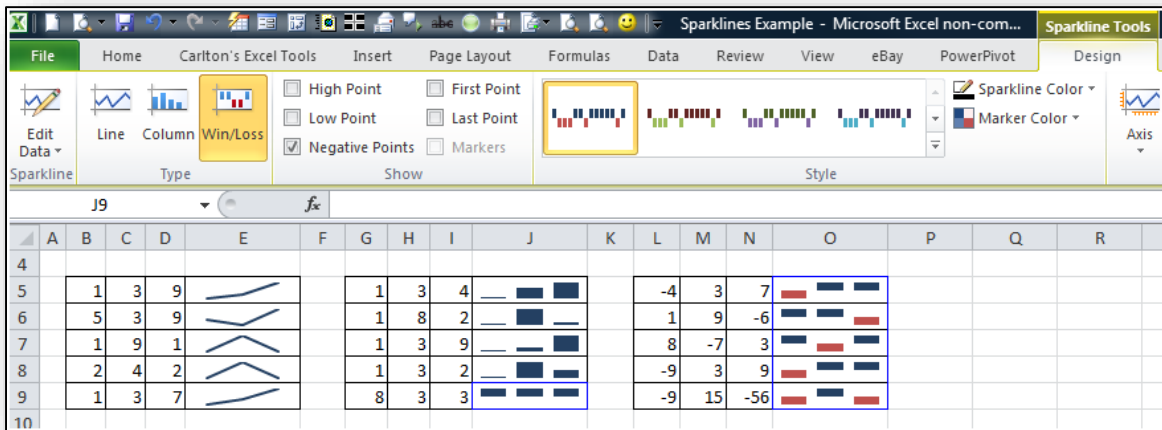


Upon the selection of the desired database a list of tables will be presented. Choose the desired tables, and select the desired data fields to be imported. You will then have the option to filter and sort the data before it is imported. Finally you will be given the option to save the query so you can run it at a later date without having to start from scratch. Excel will then return a table full of the data you requested as shown in the screen below.

	A	B	C	D	E	F	G
1	<b>CustomerNo</b>	<b>CustomerName</b>	<b>State</b>	<b>CurrentBalance</b>	<b>AvgDaysOverDue</b>		
2	ABF	American Business Futures	WI	5732.36	0		
3	AVNET	Avnet Processing Corp	WI	7377.37	52		
4	BRESLIN	Breslin Parts Supply	WI	11828.26	0		
5	HILLSB	Hillsboro Service Center	WI	2902.86	0		
6	RSSUPPL	R & S Supply Corp.	WI	7086.74	0		
7	SHEPARD	Shepard Motorworks	WI	513339.95	0		
8	ALLENAP	Allen's Appliance Repair	CA	645.51	0		
9	AMERCON	American Concrete Service	CA	13743.8	57		
10	ATOZ	A To Z Carpet Supply	CA	8732.4	37		
11	AUTOOCR	Autocraft Accessories	CA	23954.02	0		
12	BAYPYRO	Bay Pyrotronics Corp.	CA	16644.94	106		
13	CAPRI	Capri Sailing Ships	CA	56169.33	31		
14	CUSTOM	Custom Craft Products	CA	19446.43	0		
15	GREALAR	Greater Alarm Company	CA	825.5	0		
16	JELCO	Jellco Packing	CA	5055.91	0		
17	ORANGE	Orange Door & Window Co.	CA	263.37	0		
18							
19							
20							

# Sparklines

**Sparklines** – Sparklines are small cell-sized charts that you can embed in a worksheet next to data to get a quick visual representation of the data. For example, if you had a worksheet that tracked the performance of several dozen stocks, you could create a Sparkline for each stock that graphed its performance over time, in a very compact way. Here are examples:



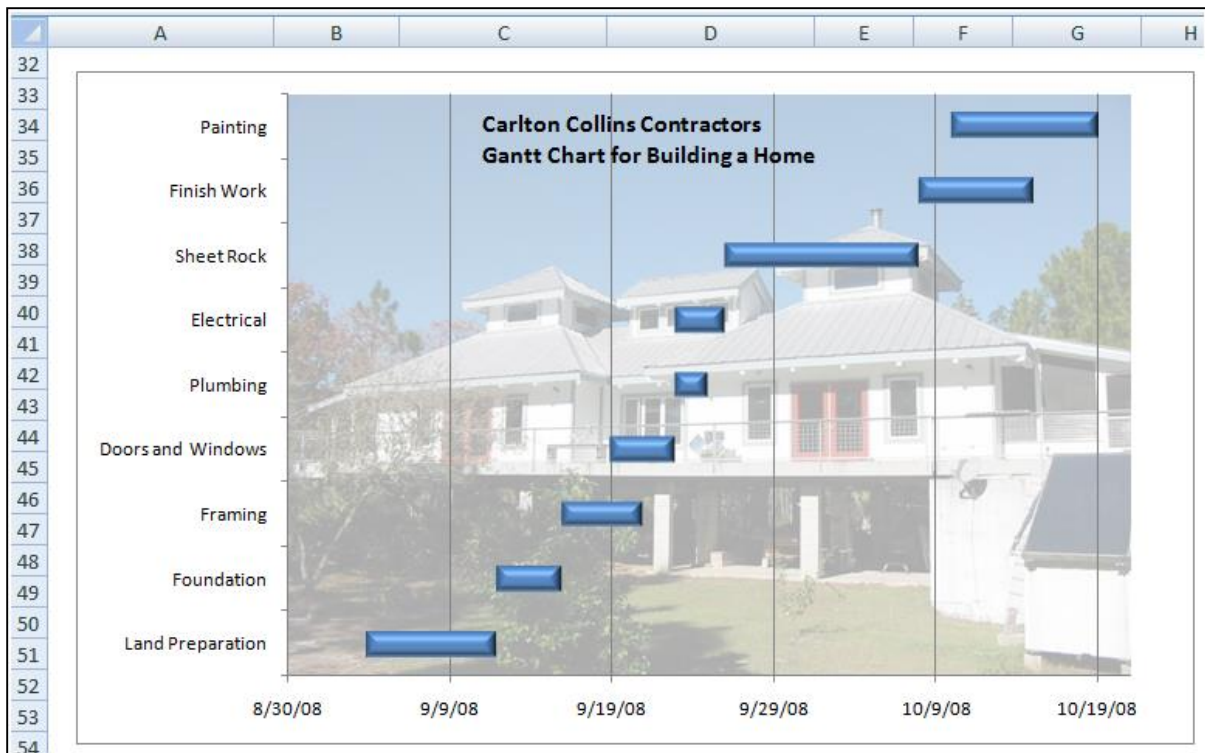
# Gantt Charts

Let's start by tricking Excel into creating a Gantt Chart. Of course Excel does not do Gantt charts, so we will apply clever tricks to achieve the desired affects. It's really not that hard and it works just as well in Excel 2013, 2010, 2007 and 2003. Start by preparing a simple list of tasks including start dates, duration of each task, and end dates (formulas in Excel can calculate the end dates). An example is shown below:

Tasks	Start Date	Duration (Days)	End Date
Land Preparation	9/4/2008	8	9/12/2008
Foundation	9/12/2008	4	9/16/2008
Framing	9/16/2008	5	9/21/2008
Doors and Windows	9/19/2008	4	9/23/2008
Plumbing	9/23/2008	2	9/25/2008
Electrical	9/23/2008	3	9/26/2008
Sheet Rock	9/26/2008	12	10/8/2008
Finish Work	10/8/2008	7	10/15/2008
Painting	10/10/2008	9	10/19/2008

1. Start by creating a stacked bar chart
2. Remove the Data Series by right mouse clicking and choosing Select Data Source
3. Add a new Data Source Named Starting Date, and point to the range of start dates for the values
4. Add another new data source named Duration (Days), and point to the range of duration days for the values
5. Add Category Axis Labels and point to the Task names in Column A
6. Remove legend by selecting legend and pressing the Delete key
7. Click on the beginning series and set the Fill and Borders to None
8. Right mouse click on the task labels, choose format Axis, and check the Categories in Reverse Order box (if needed)
9. In two blank cells, write a formula referencing the start and end dates, convert these dates to numbers with formatting
10. Use the resulting numbers to set the scale of the Gantt Chart (perhaps use a slightly larger range of dates)
11. Right mouse click on the date range, set the minimum and maximums to fixed using the numbers acquired in the above step
12. Format the date range to show a short date
13. Format the remaining data bars to display a 3-D bevel
14. For added touch, search Google images for a nice picture of a house, save it to your hard drive.
15. Set the background plot area to picture, and wash out the picture enough so that the chart is still readable.
16. Add a title or text boxes as needed to complete the description of the Gantt Chart

The resulting Gantt chart is shown below. At this point, changing any of the start dates or duration dates will automatically update the Gantt chart.

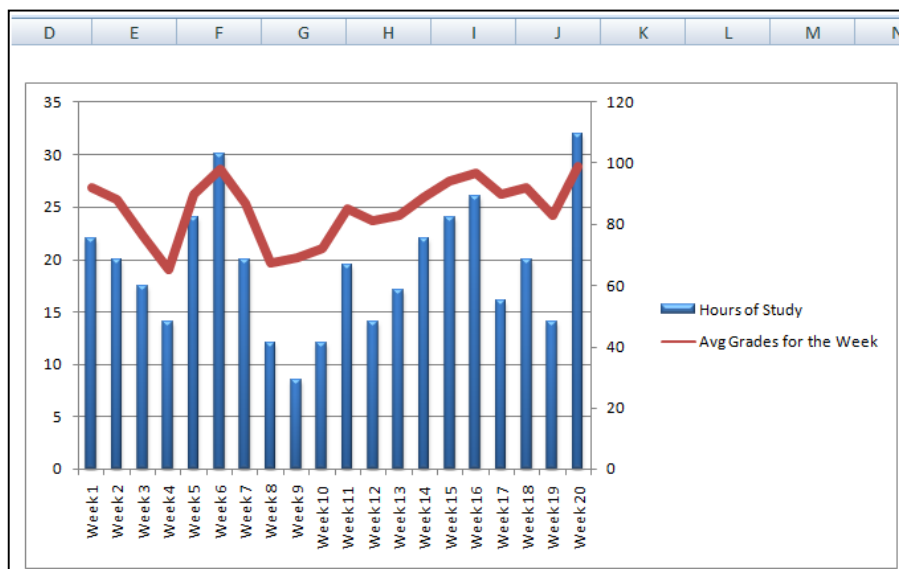


## Combination Charts

A combination chart is used to show one chart on top of another chart, using the same scale by percentage. This allows the reader to better study the data to determine whether relationships, if any, exist between the two sets of data. For example, consider the simple study hours and resulting grade information shown to the right for a new college student – we will call him Austin. We have compiled a worksheet showing the number of hours in which Austin studied each week, and the average scores he achieved on his homework, quizzes, test and exams.

1. Start by creating a line chart from your entire data range
2. Rescale the top line by right clicking and change the series option to use a secondary axis
3. Note the ranges on each side of the chart
4. Next right mouse click one of the lines and choose Change Series Chart type, and choose a column chart format
5. Now apply a chart format and study your data for any useful relationships

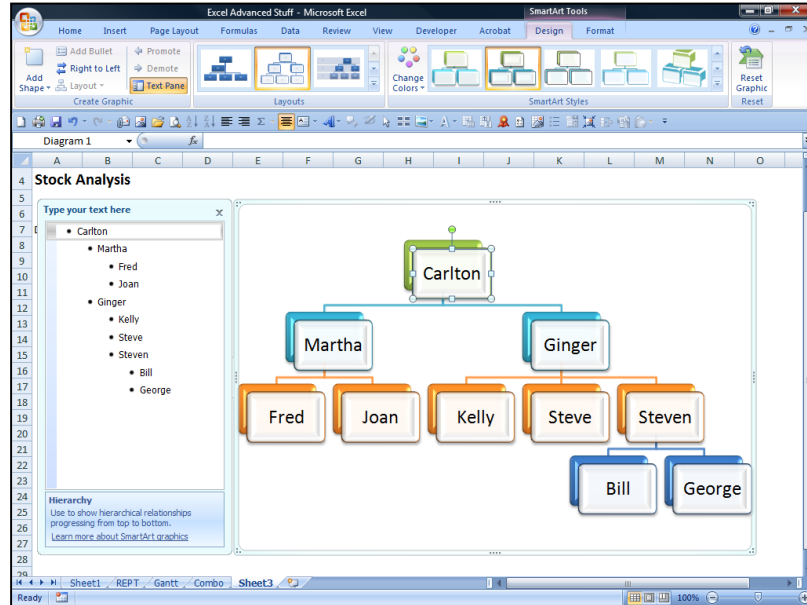
	A	B	C
1	<b>Combination Charts</b>		
2			
3	<b>Week</b>	<b>Hours of Study</b>	<b>Avg Grades for the Week</b>
4	Week 1	22	92
5	Week 2	20	88
6	Week 3	17.5	76
7	Week 4	14	65
8	Week 5	24	90
9	Week 6	30	98
10	Week 7	20	87
11	Week 8	12	67
12	Week 9	8.5	69
13	Week 10	12	72
14	Week 11	19.5	85
15	Week 12	14	81
16	Week 13	17	83
17	Week 14	22	89
18	Week 15	24	94
19	Week 16	26	97
20	Week 17	16	90
21	Week 18	20	92
22	Week 19	14	83
23	Week 20	32	99



As we can see by the resulting combination chart, approximately 26 hours of study are required each week in order to achieve an average grade of 90 or above, and approximately 20 to 22 hours of study are required each week to achieve a B average above 80. In our next case study we might want to analyze whether the amount of money his parents send to him each week affects the number of hours of study he puts forth each week.

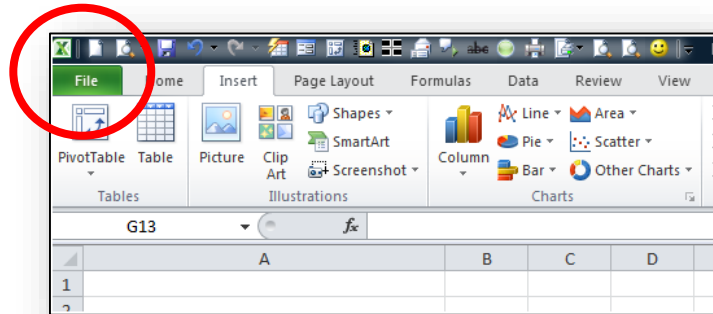
# Organization Charts

Next we will create an organizational chart using the SmartArt capabilities in Excel 2013, 2010, and 2007. Excel 2003 offers a similar tool, but it is not as pretty. Start by choosing SmartArt and point to the desired chart format.



## What's New in Microsoft Office 2010?

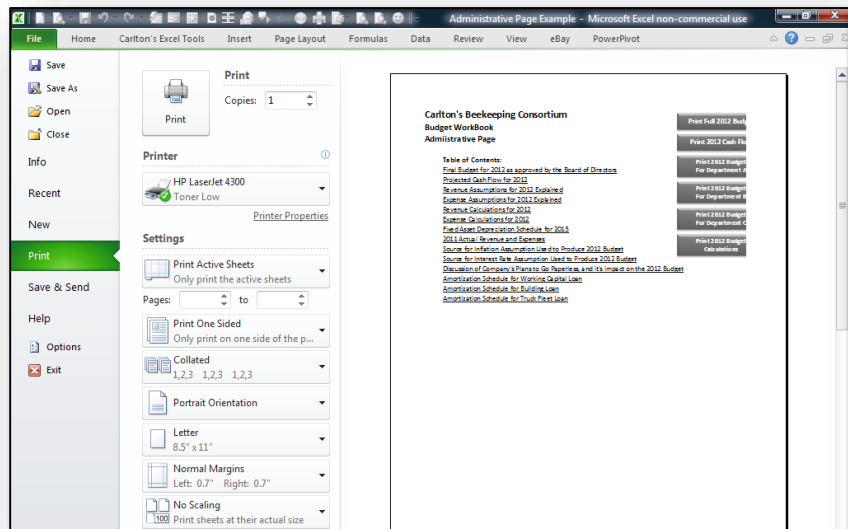
1. **Office Button Is Replaced With File Tab** – Excel 2007 included the Office Start button, which was not intuitive to anybody, despite what Microsoft said. In Excel 2010, Microsoft Office axed the office Start button in favor of the File tab. **YIPPY!**



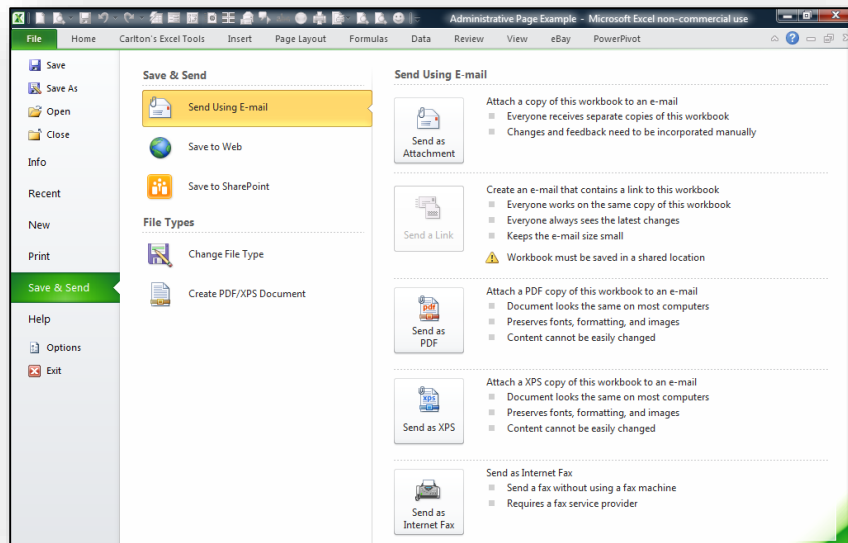
1. **Backstage View** – The file tab provides new look and feel called “Backstage View”. This new view represents one of the biggest differences you’ll notice in Microsoft Excel 2010. Backstage View is displayed by clicking on Excel’s File tab, as in all the other applications that comprise Office 2010. The backstage view in is available in the other Office 2010 applications, and each application uses a different color scheme to differentiate it from the others. In Excel 2010, the color scheme is green.

In general, Backstage View provides basically the same commands found under the File menu in previous version of Excel such as Save, Save As, Open, Close, Print, etc. What’s new is the preview screen and info tabs that accompanying some of these selections. For example, when you select the print option, a preview of the print job is automatically displayed, as shown below.

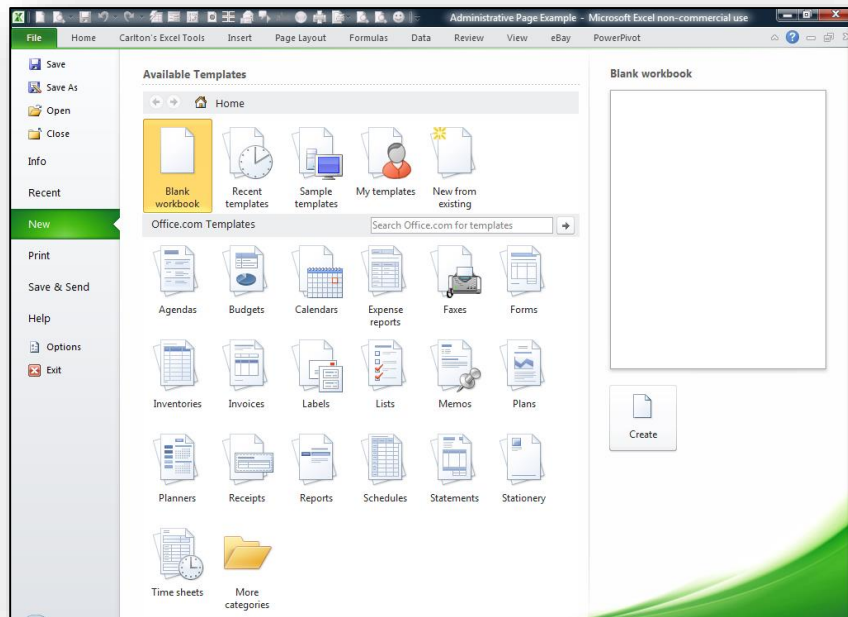




The Print option Backstage View also provides access to various Page and Print settings, such as Duplexing, Orientation, Margins, and Scaling. The save and Send option also has a new look and feel, providing buttons for emailing, publishing, and saving files, as well as options to create PDF or XPS documents.



The New option also incorporates a new look and feel with thumbnail previews of templates, and links to downloading more templates from the Web.



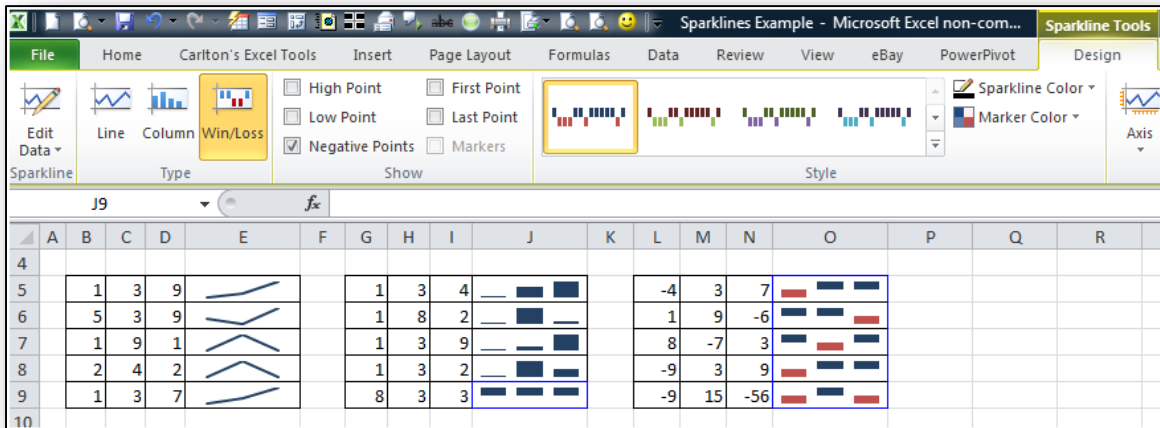
If you want to return to the old Excel 2007 look and feel when you click the File tab (not that you would want to), you can change registry settings, as detailed in this article on Turning Off The Microsoft Office 2010 OutSpace located here:

<http://www.off14.com/microsoft-office-2010-outspace/>

(They've actually got the name wrong in this article; although the registry key is named "outspace", the display is called Backstage View.)

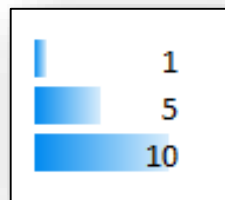
2. **Double Clicking Fill Handle Uses Connected Columns For Fill Down** – In previous versions of Excel, the double click only worked if data were located in the column immediately to the left or right of the range to be copied, but Excel 2010 will use more distant columns provided they are connected with a common set of column labels.
3. **Custom Lists Obey Character Case Example** – When using the Smart List feature, Excel 2010 obeys the case (proper, lower, and upper) that is used in your starting phrase.
4. **Remove Hyperlinks (Instead Of One Hyperlink at A Time In 2007 And 2003)** – In earlier versions of Excel, you could only remove one hyperlink at a time (the work around is to copy and paste a range containing hyperlinks and paste them as text elsewhere, then copy and paste that result back to your original location. Excel 2010 can remove all hyperlinks from a range in just one step.
5. **Sparklines** – Sparklines are small cell-sized charts that you can embed in a worksheet next to data to get a quick visual representation of the data. For example, if you had a worksheet that

tracked the performance of several dozen stocks, you could create a Sparkline for each stock that graphed its performance over time, in a very compact way. Here are examples:

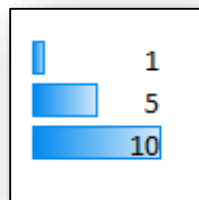


6. **Conditional Formatting Improvements** – Microsoft has improved and added more styles and icons regarding the ability to apply a format to a range of cells, and then have the formatting change according to the value of the cell or formula.

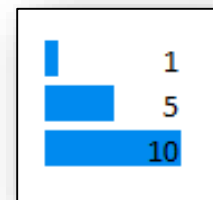
a. **Solid Bars** - Data Bars can be solid now in Excel 2010. Excel 2007 bars offered only a gradient effect, which was visually confusing to read. Below is a comparison on the Excel 2007 and Excel 2010 Data Bar options.



2007 Gradient



2010 Gradient



2010 Solid

b. **Negative Numbers** - Microsoft also corrected a problem which Excel 2007 had creating when Data Bars based on negative numbers by adding axis support for both positive and negative values. The screens shots below show Excel 2010’s new solution, and how Excel 2007 got confused when applying Data Bars to the exact same data.

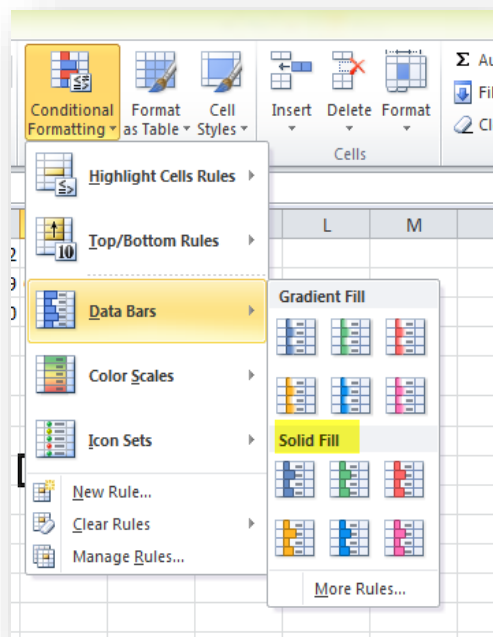
Budget	Actual	Difference	% Difference
31,800	38,765	(6,965)	-22%
1,100	940	160	15%
4,200	7,698	(3,498)	-83%
189,200	266,548	(77,348)	-41%
15,000	12,825	2,175	14%
25,400	60,511	(35,111)	-138%
4,600	3,710	890	19%
7,200	654	6,546	91%
49,800	39,501	10,300	21%
107,600	116,970	(9,370)	-9%
15,400	11,849	3,551	23%
700	900	(200)	-29%
241,600	210,103	31,498	13%
43,800	68,618	(24,818)	-57%
27,600	57,897	(30,297)	-110%

Excel 2010's Data Bars

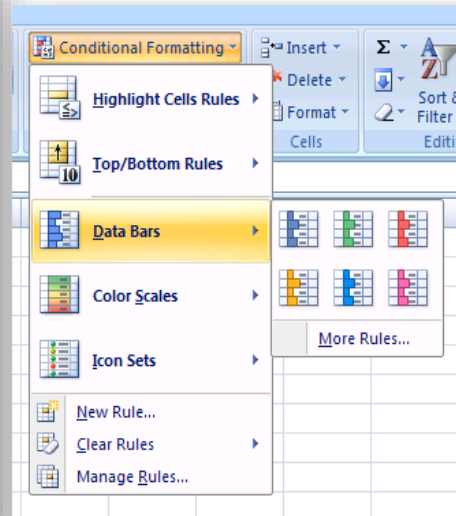
nce	% Difference
,965	-22%
160	15%
,498	-83%
,348	-41%
,175	14%
,111	-138%
890	19%
,546	91%
,300	21%
,370	-9%
,551	23%
-200	-29%
,498	13%
,818	-57%
,297	-110%

Excel 2007's Data Bars

- c. **More Data Bar Options** - Notice that Microsoft added more Data Bar options as shown in the comparison below.

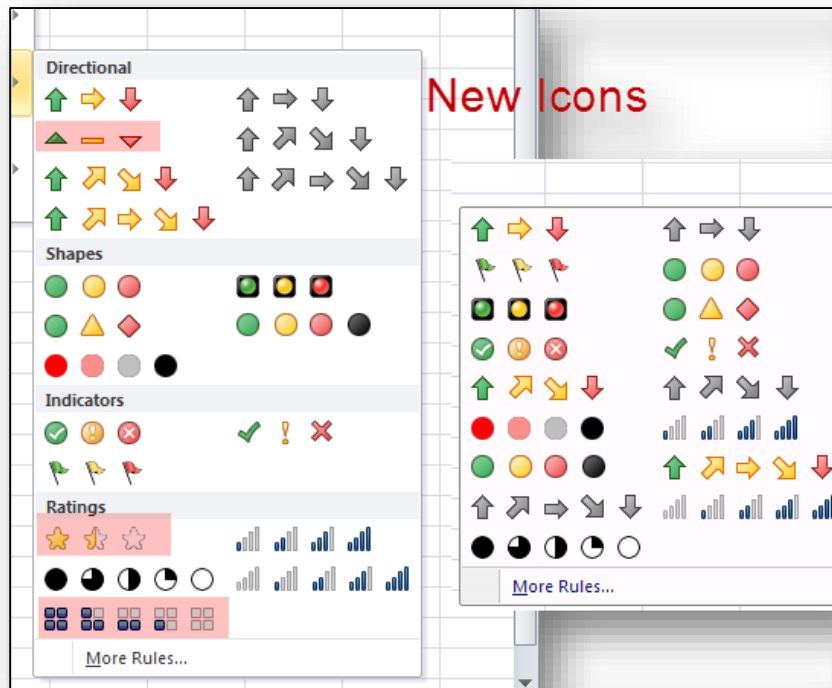


Excel 2010's Data Bar Menu



Excel 2007's Data Bar Menu

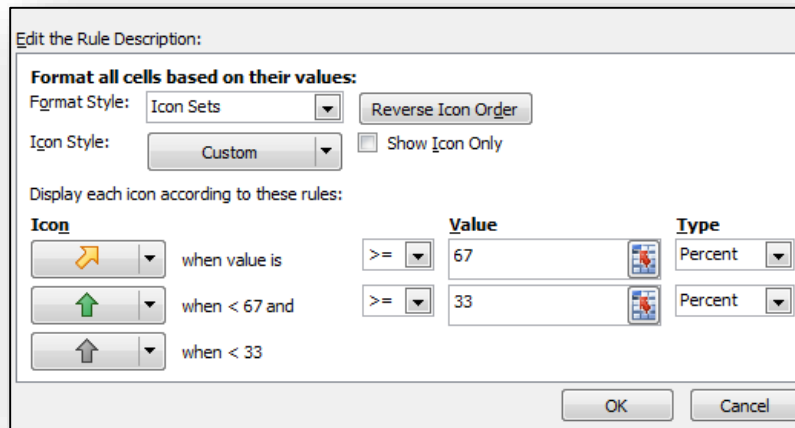
- d. **More Icon Options** - Notice that Microsoft added more Data Bar options as shown in the comparison below.



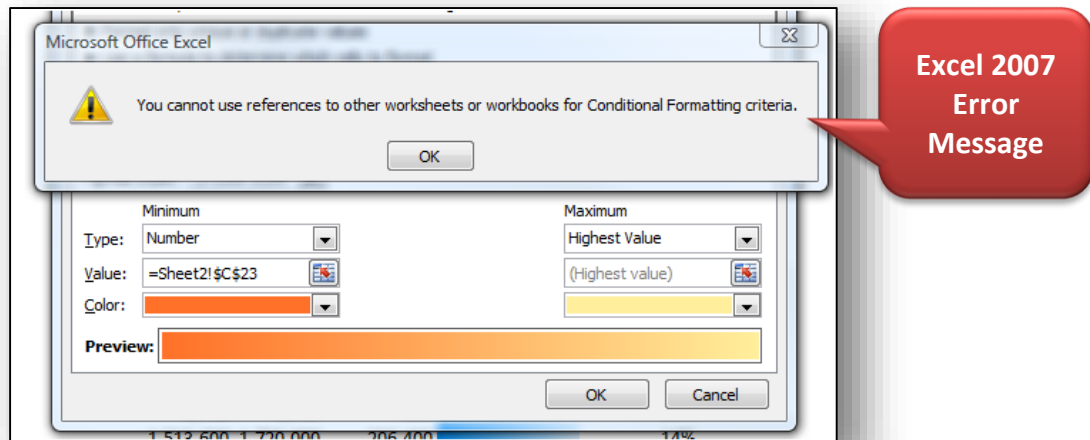
Excel 2010's Icon Menu

Excel 2007's Icon Menu

- e. **Arrow Colors** - It is possible to change icons used for KIP i.e. You can have two arrows with different colors of if negative impact and positive growth are good for you.



- f. **Referring to Data** - You can now refer to data on different worksheets, and even refer to a range outside the Conditional Formatting area. The screen below shows the error message produced by Excel 2007 when you attempted to reference cells outside the Conditional Formatting area; Excel 2010 now accommodates this situation.



7. **Microsoft Excel Web App's Improved Sharing** – Excel 2010 has new and improved tools for sharing data with other people, including multiple people working on the same document at the same time. Excel Web App extends your Excel experience to the web browser, where you can work with workbooks directly on the site where the workbook is stored. Excel Web App is part of Microsoft Office Web Apps, and is available in Windows Live SkyDrive and in organizations that have configured Office Web Apps on SharePoint 2010. With Excel Web App, you can:

- a. **View** - View a workbook in the browser - When you click on a workbook to open it in Excel Web App, the workbook is displayed in view mode.
- b. **Sort and Filter** - You can sort and filter data in the workbook, expand PivotTables to see relationships and trends in the data, recalculate values, and view different worksheets.
- c. **Browser-Based Editing** - Edit a workbook in the browser - With Excel Web App, all you need to access your workbooks is a browser.
- d. **Share** - Your teammates can work with you, regardless of which version of Excel they have.
- e. **Looks the Same** - Your workbooks look the same in the browser as they do in Excel.
- f. **Excel Tools** - You can edit your worksheets in the browser, using the familiar look and feel of Excel. When you edit in the browser, you can change data, enter or edit formulas, and apply basic formatting within the spreadsheet.
- g. **Simultaneous Access** - You can also work with others on the same workbook at the same time.

Microsoft offers a free solution called Windows Live SkyDrive, which enables everyone in your group to share Word and Excel (and other) documents. This solution also provides users with Word, Excel and PowerPoint applications (with limited functionality) so your group members can work in the same applications.

To use SkyDrive, sign up for a free Windows Live account at <http://explore.live.com/>. Under the **SkyDrive** menu, select **Get started** and follow the instructions for setting up a Windows Live account. Once you have completed the registration process, sign into your Windows Live Sky Drive account and click the **Office** menu option at the top of the screen to view your **SkyDrive** as follows:



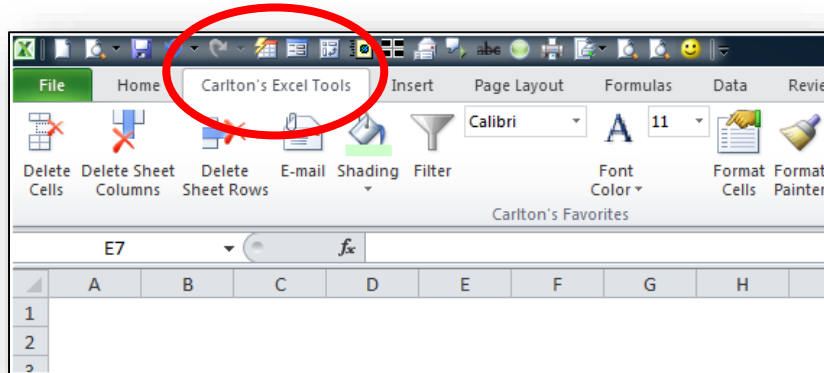
Next create a folder and upload (or create) the group's Word and Excel files. Select the folder and click the **Share** menu option as shown to edit permissions and to send links to your group members, which will enable them to access the data files.



When sharing files in this manner, to better protect your data, check the checkbox labeled **Require recipients to sign in with Windows Live ID**. This action will require your group members to obtain their own Windows Live accounts and use their passwords in order to access the data files. Otherwise, anyone who receives the link will be able to access the data files.

**Notes:** The free version of Windows Live Sky Drive is limited to 25 GBs of storage, and individual files are limited to 50 MBs. For a fee, you can increase these capacities. Installing Microsoft's free Silverlight browser add-in will enable drag and drop functionality to and from your SkyDrive. The Windows Live SkyDrive solution was first introduced in August 2007, and is widely used.

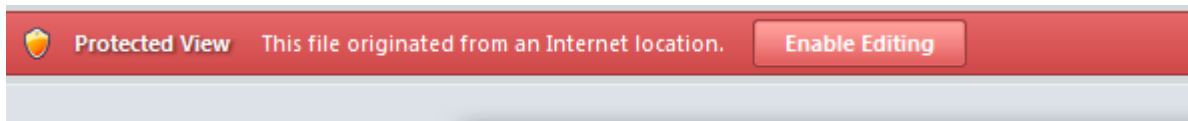
8. **Customize the Ribbon Toolbar** - The Ribbon tool bar has been enhanced, and is now highly customizable. For example, you can add your own tabs to the Ribbon (as shown below), you can add your own groups to each tab (also shown below), and you can add any commands or macros to your customized tabs and groups.



9. **Compatibility of .xlsx** - In Excel 2007, Microsoft introduced a new XML format (.xlsx) which was not compatible with former .xls spreadsheet formats. This problem has been resolved - Excel files created in Excel 2010 may easily be opened in versions of Excel prior to Excel 2007. Now Excel 2010 will save files just as safe as the former Excel 2007, and the spreadsheet size is 75% smaller than the old .XLS version.

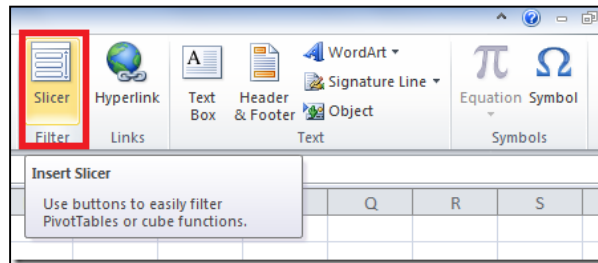


10. **Protected Mode** - Excel 2010 includes a Protected View, so you can see the document and make a more informed decision before exposing your computer to possible vulnerabilities. By default, documents that originate from an Internet source are opened in Protected View. When this happens, you see a warning on the Message bar, along with the option to enable editing. You can control which originating sources trigger Protected View. You can also set specific file types to open in Protected View regardless of where they originate. Excel will not allow you to edit the documents unless document editing is enabled. To do this, click the *Enable Editing* option in order to enable document editing as shown in the following screen shot.

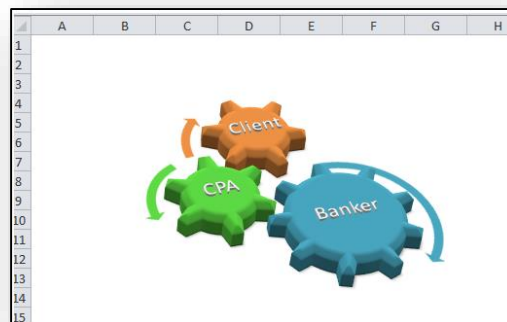




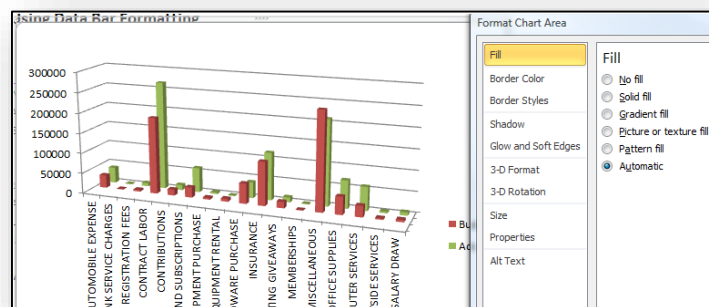
- 11. **Trusted Documents** - The trusted documents feature is designed to make it easier to open workbooks and other documents that contain active content, such as data connections or macros. Now, after you confirm that active content in a workbook is safe to enable, you don't have to repeat yourself. Excel 2010 remembers the workbooks you trust so that you can avoid being prompted each time you open the workbook.
- 12. **Slicer** - The Slicer feature provides new slice and dice capabilities within PivotTables – this helps you dynamically segment and filter the data. This feature is located on the *Insert* Tab.



- 13. **Macro** - Macros in Excel 2010 now support working with shapes, including creating, moving or editing shapes. For example, you could now record a macro that automatically insert s the following SmartArt object.



- 14. **Enhanced Chart Diagram** - In Excel 2010 double clicking a chart element automatically opens the chart's format dialog box.



- 15. **64-bit version of Excel 2010** - Excel 2010 is now available in a 64-bit version, which means that it can take full advantage of your computer's 64-bit motherboard and access more than 4 GBs of RAM. The result is even faster performance.
- 16. **Microsoft SQL Server PowerPivot for Excel** - Excel 2010 now includes an add-in tool called Microsoft SQL Server PowerPivot which is a Business Intelligence tool that enables you to query multiple SQL Server databases across multiple corporate systems and web data on a real-time basis to produce PivotTables that can be shared via SharePoint. You can try this online at the following Virtual Labs web site:

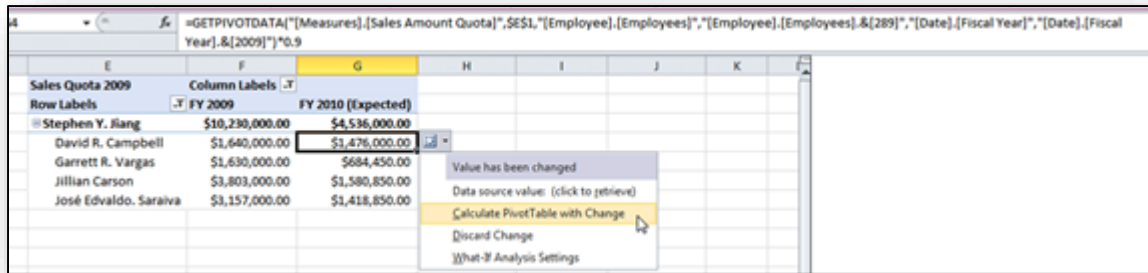
<https://cmg.vlabcenter.com/prepare.aspx?moduleid=ad3bd3e9-8d2b-498d-94fa-e41e1b09730d&ticks=633992819904236083>.

Microsoft now offers Project Gemini add-on for Excel 2010 that can handle very large amounts of data -- even worksheets that include hundreds of millions of rows. It will ship as part of SQL Server 2008 R2 in the first half of 2010; a community technology preview will be available in the second half of 2009.

- 17. **What-If with Write-Back** - PivotTable What-If Analysis is the ability to modify values in PivotTable cells, recalculate the PivotTable with those values and, if the results are satisfactory, publish the changes so that they are reflected in the OLAP data source for other people to see. This feature is also called write back, though it really goes beyond just the ability to write values back to the cube. "What if our sales for New York increased by 10%?" "What if the total number of product orders fell by 25%?" These are examples of questions that PivotTable What-If Analysis is aimed at helping the user answer. Let's take a look at the following scenario:

Row Labels	FY 2009	FY 2010 (Expected)
Stephen Y. Jiang	\$10,230,000.00	\$4,536,000.00
David R. Campbell	\$1,640,000.00	\$851,850.00
Garrett R. Vargas	\$1,630,000.00	\$684,450.00
Jillian Carson	\$3,803,000.00	\$1,580,850.00
José Edvaldo. Saraiva	\$3,157,000.00	\$1,418,850.00

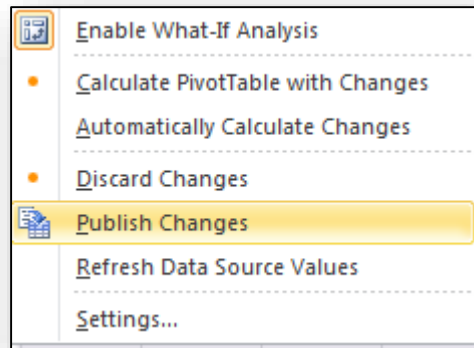
Stephen, the sales manager at a small IT company, is trying to figure out what his optimal sales quotas should look like for 2010. Based on a previous analysis and forecasts for next year it seems like 2010 will have a large decrease in sales which would mean his quotas would be reduced by 10% from the 2009 quotas. With the new PivotTable What-If Analysis feature he can now modify the relevant values in his PivotTable report and calculate the PivotTable with the changes to see what the totals would look like without actually modifying the data source. (click to see larger image)



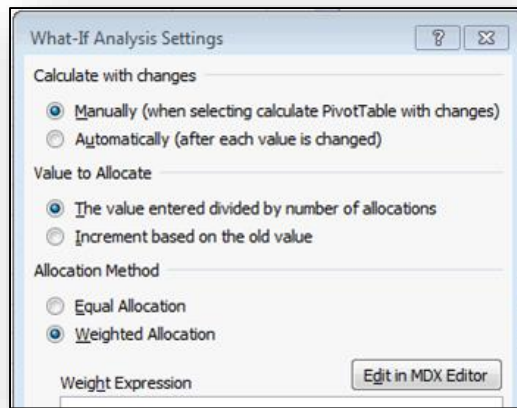
So here is what his PivotTable looks like after calculating with the changes:

Sales Quota 2009	FY 2009	FY 2010 (Expected)
Stephen Y. Jiang	\$10,230,000.00	\$9,207,000.00
David R. Campbell	\$1,640,000.00	\$1,476,000.00
Garrett R. Vargas	\$1,630,000.00	\$1,467,000.00
Jillian Carson	\$3,803,000.00	\$3,422,700.00
José Edvaldo. Saraiva	\$3,157,000.00	\$2,841,300.00

If he wants to keep these numbers and share them with other people he can go ahead and publish the changes to the OLAP data source.



He can also just keep the changes locally without publishing back to the OLAP data source by simply saving the file. When the workbook is loaded again in Excel 2010 all the changes will be reapplied and the PivotTable recalculated. With little knowledge of OLAP data sources the manager was able to change values and recalculate his PivotTables. The changes can be shared across the organization by simply sharing the workbook or publishing the changes back to the OLAP data source.

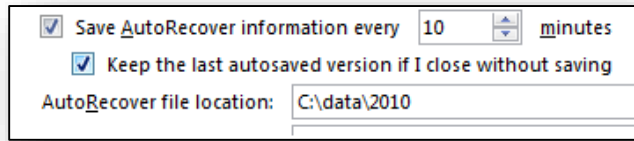


**Advanced Options** - Advanced options for PivotTable What-If Analysis include being able to change the allocation method, which is the methodology in which the OLAP data source will allocate the newly entered values in the cube. Excel 2010 also gives you the ability to define your own weight allocation definitions from within an MDX editor.

18. **Recover Earlier Versions Of A File In Office 2010** - It is now easier to recover a Microsoft Word 2010, Microsoft Excel 2010, or Microsoft PowerPoint 2010 file if you close your file without saving, or you want to review or return to an earlier version of the file you're already working in.

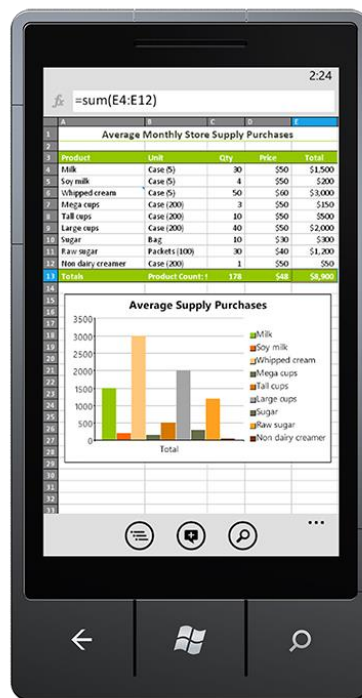
As with earlier versions of Office, enabling AutoRecover in Word 2010, Excel 2010 or PowerPoint 2010 will save versions while you are working in your file at the interval you select. Now, you can choose to keep the last autosaved version of a file in case you accidentally close that file without saving, so that you can restore it the next time that you open the file. Also, while you are working in your file, you can access a listing of the autosaved files from the Microsoft Office Backstage view.

**Note:** You must have the “Save AutoRecover information” and “Keep the last autosaved version if I close without saving” enabled for these features to work. (The Recover Unsaved Workbooks option is available from the File tab, under the Recent menu option.)



19. **Named Sets** - Named Sets have been added to Microsoft Excel 2010, allows you to create your own named sets. Simply locate the *Fields, Items, & Sets* button under the Ribbon, and it will allow you to define your own Named Sets.

20. **Excel Mobile 2010 for Windows Phone 7** - If you have Windows Phone 7, you can use Microsoft Office Mobile 2010 to work with your files from anywhere—whether you're at work, at home, or on the go. Excel Mobile 2010 is part of Office Mobile and already on your phone in the Office Hub, so you don't need to download or install anything else to get started.



You can use Excel Mobile to view and edit workbooks stored on your phone, sent to you as email attachments, or hosted on a SharePoint 2010 site through SharePoint Workspace Mobile 2010. When you edit a workbook via SharePoint Workspace Mobile, you can save your changes back to the SharePoint site when you're online. You can create, update, and instantly recalculate your spreadsheets using many of the same tools you already know and use in the desktop version of Excel:

- a) Use the outline view to switch between worksheets or charts in a workbook.

- b) Sort, filter, and manage your spreadsheets.
- c) Add or edit text and numbers.
- d) Add comments.

## 21. Improved PivotTables

PivotTables are now easier to use and more responsive. Key improvements include:

- a) **Performance** - In Excel 2010, multi-threading helps speed up data retrieval, sorting, and filtering in PivotTables.
- b) **PivotTable Labels** - It's now possible to fill down labels in a PivotTable. You can also repeat labels in PivotTables to display item captions of nested fields in all rows and columns. **Watch a video about repeating item labels.**
- c) **Enhanced Filtering** - You can use slicers to quickly filter data in a PivotTable with the click of a button and see which filters are applied without having to open additional menus. In addition, the filter interface includes a handy search box that can help you to find what you need among potentially thousands (or even millions) of items in your PivotTables.
- d) **Write-back Support** - In Excel 2010, you can change values in the OLAP PivotTable Values area and have them written back to the Analysis Services cube on the OLAP server. You can use the write-back feature in what-if mode and then roll back the changes when you no longer need them, or you can save the changes. You can use the write-back feature with any OLAP provider that supports the UPDATE CUBE statement.
- e) **Show Values As feature** - The **Show Values As** feature includes a number of new, automatic calculations, such as **% of Parent Row Total**, **% of Parent Column Total**, **% of Parent Total**, **% Running Total**, **Rank Smallest to Largest**, and **Rank Largest to Smallest**. **Watch a video about changes to the Show Values As feature. Watch a video about changes to the Show Values As feature.**
- f) **PivotChart Improvements** - It is now easier to interact with PivotChart reports. Specifically, it's easier to filter data directly in a PivotChart and to reorganize the layout of a PivotChart by adding and removing fields. Similarly, with a single click, you can hide all field buttons on the PivotChart report.

**22. Improved Solver Add-In** - Excel 2010 includes a new version of the Solver add-in, which you can use to find optimal solutions in what-if analysis. Solver has an improved user interface, a new Evolutionary Solver, based on genetic algorithms, that handles models with any Excel functions, new global optimization options, better linear programming and nonlinear optimization methods, and new Linearity and Feasibility reports. In addition, the Solver add-in is now available in a 64-bit version.

Use Solver to determine the maximum or minimum value of one cell by changing other cells. For example, you can change the amount of your projected advertising budget and see the effect on your projected profit amount.

**Example of a Solver problem** - In the following example, the level of advertising in each quarter affects the number of units sold, indirectly determining the amount of sales revenue, the associated expenses, and the profit. Solver can change the quarterly budgets for advertising (cells B11:E11), up to a total budget constraint of \$40,000 (cell F11), until the value for the total profit reaches the maximum possible amount. The values in the decision variable cells are used to calculate the profit for each quarter, so the values are related to the formula in the target cell F15, =SUM(B15:E15).

	A	B	C	F
6		Q1	Q2	Totals
8	Lorem			
9	Ipsum			
10	Dolor			
11	Sit	10,000	10,000	40,000
12	Amet			
15	Profits			69,662

- 1 Decision variable cells
- 2 Constraint cell
- 3 Objective cell

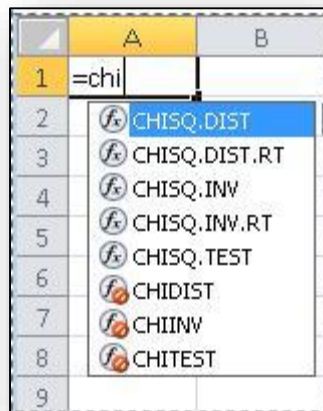
After Solver runs, the new values are as follows.

11	Sit	7,273	12,246	40,000
12	Amet			
15	Profits			71,447

For more solver examples, check out:  
<http://www.solver.com/excel2010/solverhelp.htm>

**23. Improved Function Accuracy** - Excel 2010 includes more accurate statistical and other functions. Certain existing functions have also been renamed to better describe what they do, as follows:

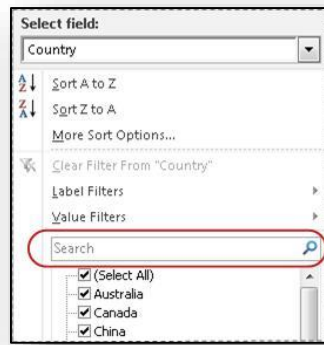
- a) **Accuracy Improvements** - A number of functions have been optimized to improve accuracy. For example, Excel 2010 returns more accurate results for the beta and chi-squared distributions.
  
- b) **More Consistent Functions** - Certain statistical functions have been renamed so that they are more consistent with the function definitions of the scientific community and with other function names in Excel. The new function names also more accurately describe their functionality. Workbooks created in earlier versions of Excel will continue to work despite these name changes, because the original functions still exist in a **Compatibility** category.



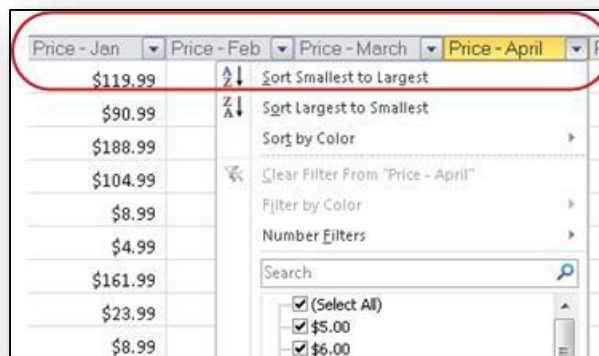
**24. Improved Filter Capabilities** - In addition to slicers, which are described earlier in this article, Excel 2010 comes with new features that make it easier to sort and filter data, as follows.

- a. **New search filter** - When you filter data in Excel tables, PivotTables, and PivotCharts, you can use a new search box, which helps you to find what you need in long lists. For example, to find a specific product in a catalog that stocks over 100,000 items, start by typing your search term, and relevant items instantly appear in the list. You can narrow the results further by deselecting the items you don't want to see.





- b. **Filter And Sort Regardless Of Location** - In an Excel table, table headers replace regular worksheet headers at the top of columns when you scroll down in a long table. AutoFilter buttons now remain visible along with table headers in your table columns, so you can sort and filter data quickly without having to scroll all the way back up to the top of the table.



25. **Performance Enhancements** - Performance improvements in Excel 2010 can help you to interact with your data more efficiently. Specific investments include:

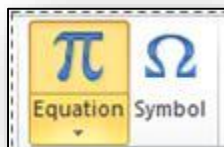
- a) **General improvements** - Excel 2010 is more responsive when you move and resize charts, work in Page Layout view, and interact with shapes on the worksheet.
- b) **Support For Large Data Sets** - Excel 2010 handles workbooks that contain massive amounts of data more efficiently. Specifically, it takes less time to perform activities commonly performed on large data sets, such as filtering and sorting the data, copy and pasting it from one worksheet to another, and using the Fill feature to copy formulas.

- c) **Multicore Improvements** - Multithreading improvements in Excel 2010 help to speed up the process of retrieving, sorting, and filtering data in PivotTables and Excel tables. In addition, opening and saving large files is generally faster than before.
- d) **Faster Calculation** - To achieve faster calculation performance, Excel 2010 includes support for asynchronous user-defined functions, which can run simultaneously without using multiple Excel calculation threads.

26. **Improved Charting** - It's now easier to work with charts in Excel 2010. Specific improvements include:

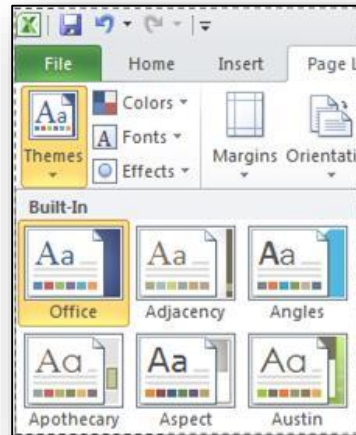
- a) **New Charting Limits** - In Excel 2010, the limitation on the number of data points that can be created on a chart has been removed. The number of data points is now limited only by available memory.
- b) **Quick Access To Formatting Options** - In Excel 2010, you can instantly access formatting options by double-clicking a chart element.
- c) **Macro Recording For Chart Elements** - In Office Excel 2007, recording a macro while formatting a chart or other object did not produce any macro code. In Excel 2010, however, you can use the macro recorder to record formatting changes to charts and other objects.

27. **Support for Equations** - You can use the new equation editing tools in Excel 2010 to insert common mathematical equations into your worksheets or to build up your own equations by using a library of math symbols. You can also insert new equations inside of text boxes and other shapes. To get started, on the Insert tab, in the Symbols group, click the arrow next to Equation.

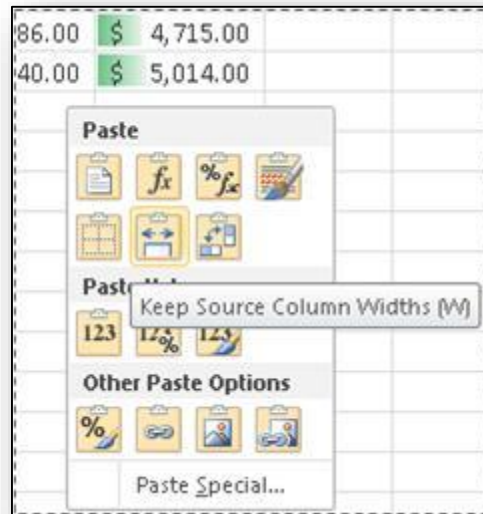


A screenshot of the 'Binomial Theorem' equation editor. The title bar reads 'Binomial Theorem'. The main area contains the mathematical equation 
$$(x + a)^n = \sum_{k=0}^n \binom{n}{k} x^k a^{n-k}$$

28. **More Themes** - In Excel 2010, there are more themes and styles than ever before. These elements can help you apply professional designs consistently across your workbooks and other Microsoft Office documents. Once you select a theme, Excel 2010 does the design work. Text, charts, graphics, tables, and drawing objects all change to reflect the theme you have selected, so that all elements in your workbook visually complement one another.

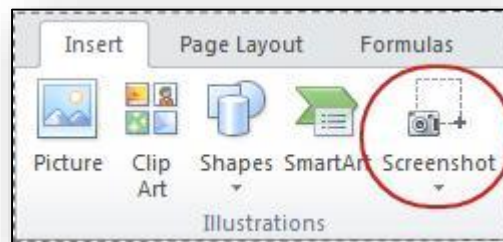


29. **Paste With Live Preview** - The paste with live preview feature enables you to save time when reusing content within Excel 2010 or across other programs. You can use it to preview various paste options, such as Keep Source Column Widths, No Borders, or Keep Source Formatting. The live preview enables you to visually determine how your pasted content will look before you actually paste it in the worksheet. When you move your pointer over Paste Options to preview results, you'll see a menu containing items that change contextually to best fit the content you are reusing. ScreenTips provide additional information to help you make the right decision.



30. **Improved Picture-Editing Tools** - If you use photos, drawings, or SmartArt to communicate visually, you can take advantage of the following features:

- a) **Screenshots** - Quickly take a screenshot and add it to your workbook, and then use the tools on the **Picture Tools** tab to edit and improve the screenshot.



- b) **New SmartArt Graphic Layouts** - With new picture layouts, you can tell your story with photographs. For example, use the Captioned Picture layout to show pictures with nice-looking captions underneath.

- c) **Picture Corrections** - Fine tune the color of a picture, or adjust its brightness, contrast, or sharpness—all without having to use additional photo-editing software.
- d) **New and Improved Artistic Effects** - Apply different artistic effects to your picture to make it look more like a sketch, drawing, or painting. New artistic effects include Pencil Sketch, Line Drawing, Watercolor Sponge, Mosaic Bubbles, Glass, Pastels Smooth, Plastic Wrap, Photocopy, Paint Strokes, and many more.
- e) **Better Compression And Cropping** - You now have better control of the image quality and compression tradeoffs, so that you can make the right choice for the medium (print, screen, e-mail) that your workbook will be used for. **Read more about cropping and picture compression.**

**31. Accessibility Checker** - The new Accessibility Checker tool in Excel 2010 enables you to find and fix issues that can make it difficult for people with disabilities to read or interact with your workbook. You can open the Accessibility Checker by clicking the File tab, clicking Check for Issues, and then clicking Check Accessibility. Errors and warnings will appear in a task pane. You can then review the issues and see which ones you need to fix. In addition to the Accessibility Checker, you can add alternative text to more objects in your worksheet, including Excel tables and PivotTables. This information is useful to people with visual impairments who may be unable to easily or fully see the object.

**32. Improved Language Tools** - In the Excel Options dialog box, multilingual users can quickly set preferences for editing, display, ScreenTip, and Help languages. And, changing your language settings in Excel automatically changes them across all applicable Microsoft Office 2010 applications. If you don't have the software or keyboard layout installed that you need, you are notified, and links are provided to make it easier to quickly resolve such issues.

**33. Improved Programmability Features** - Improvements for developers include:

- a) **Changes to the XLL SDK** - The XLL Software Development Kit (SDK) now supports calling new worksheet functions, developing asynchronous user-defined functions, developing cluster-safe user-defined functions that can be offloaded to a compute cluster, and building 64-bit XLL add-ins.
- b) **VBA Improvements** - Excel 2010 has a number of features that will enable you to migrate any remaining Excel 4.0 macros you may have to VBA. Improvements include better performance for print-related methods and chart properties not previously accessible with VBA.
- c) **Better User-Interface Extensibility** - If you develop custom workbook solutions, you have more options for programmatically customizing both the ribbon and the new Backstage view. For example, you can programmatically activate tabs on the ribbon, and make custom tabs behave similarly to built-in contextual tabs, where tabs only appear when specific events occur. In addition, you can make custom ribbon groups

grow and shrink as the ribbon is resized and customize context menus with rich controls. You can also add custom UI and other elements to the Backstage view.

- d) **Changes to the Open XML SDK** - The Open XML SDK 2.0 now supports schema-level objects, in addition to the part-level support introduced in the Open XML SDK 1.0. This makes it easier to programmatically manipulate workbooks and other documents outside the Office 2010 desktop applications—for example, as part of a server-based solution.

### 34. **Sixty One New Functions in Excel 2010**

In Excel 2010, Microsoft added 61 new functions and improved 19 others. This page contains a summary of those new functions and improvements. CPAs will notice that many of these functions are more scientific in nature, or are geared more towards engineers and statisticians. However, there are a handful of new functions that apply to the CPA function - particularly when it comes to data analysis. I've place a 😊 next to those new functions which I consider more useful in standard CPA applications.

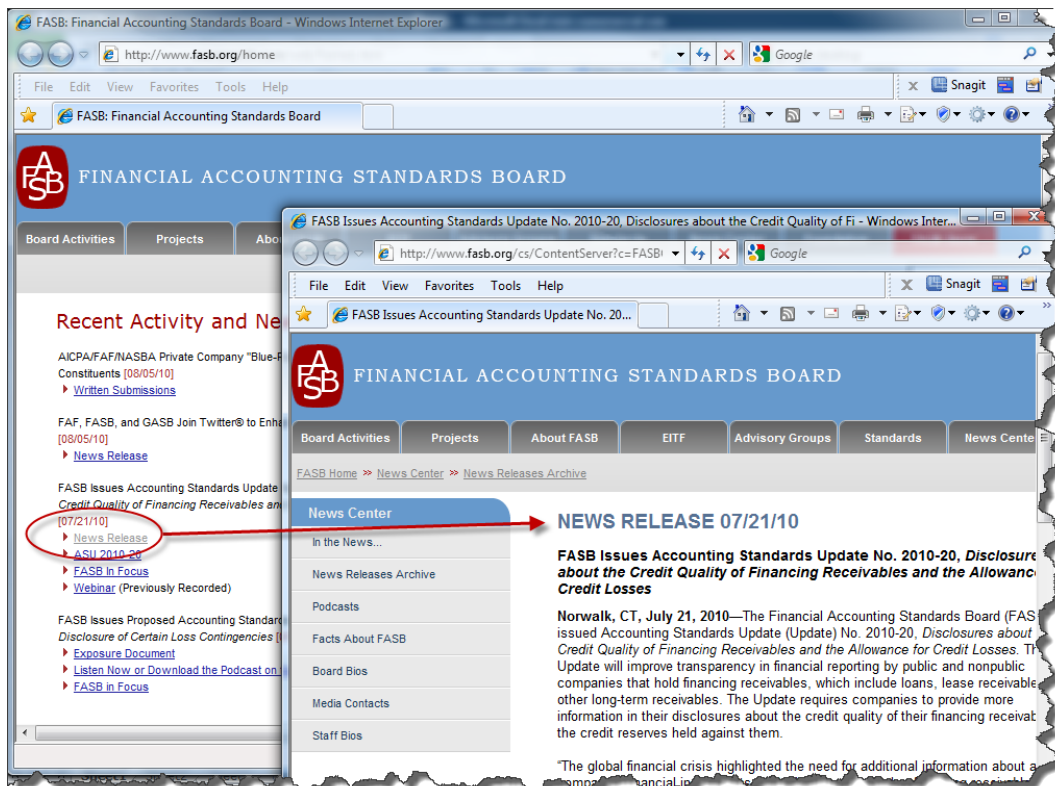
## Microsoft Office Tips

Tech Q & A Article Title	Subject
That's A Shifty Move	Windows - Internet Explorer Trick
I Hope to See You Zoom	Excel - Zoom
Heaven Help Us	Windows - GodMode
Would You Like to Share A Date?	Outlook - Shared Calendars
It's Time to Split	Excel's Split Tool
Help, I Can't Click Back!	Windows - Internet Explorer Trick
I Command You	Excel's Hidden Tools
Full Screen Ahead	Windows - Internet Explorer Trick
I Report to Inform You...	QuickBooks - Grouping Reports
Say Goodbye to Wimpy Searches	Windows - Indexed Searching
The Search for a Better Search	Windows - Advanced Searching
Picture This	FaceBook - Save a Picture
Dating Tips	Excel – Date Entry
Count On It	Windows Calculator
Hide Me Quick	Excel – Custom Views
Caps Off to You	Word – Caps Lock
Powerful Points for PowerPoint	PowerPoint (5 Tips)
An Excellent Arrangement	Excel – New Window
Pasting Away Again...	Excel – Paste Trick
A Sticky Situation	Windows Sticky Notes
Foot Your Financials in Excel	Excel
An Iconic Solution	Windows Icons
A Smart Solution to Formatting Bullet Lists	Word
Internet Explorer 8 Shortcuts	IE Shortcuts
Windows Shortcuts	Windows Shortcuts
Add Value, Instantly	Excel
A Colorful Preview	Windows/Excel
Ergonomics Checklist	Other
One Tall Solution	Excel
<b>A Colorful Preview</b>	<b>Windows/Excel</b>
<b>Mastering Your CDs</b>	<b>Windows</b>
<b>Your Finest Port</b>	<b>Outlook</b>
<b>Outlook 2010 &amp; 2007 Shortcuts</b>	<b>Outlook</b>
<b>Hiding between the pages</b>	<b>Word</b>
<b>Your type is not allowed</b>	<b>Word</b>
<b>Drive-by viruses</b>	<b>Security</b>
<b>Desperately Geeking Susan</b>	<b>Other</b>
<b>Conditional aftermath</b>	<b>Excel</b>
<b>IE 8 shortcuts</b>	<b>IE Shortcuts</b>

## That's A Shifty Move

**Q** Because I live in a rural area, slower access to the internet is my only option, but I still do a great deal of reading on the web. The slower speed makes it frustrating to click back and forth between the articles and the main page because I have to wait for the main page to reload each time. Is there a way to speed up my browser?

**A** Here is an easy solution for you. The next time you click a hyperlink on your main page to read a news story, hold down the **Shift Key**. This action will cause the news story to launch in a new browser window. When you are done reading the news story, simply close the browser window and the original browser window continuing the main page will remain intact. In the example below I've clicked the **News Release** hyperlink on the FASB web site while holding down the **Shift Key**. This action caused the linked article to launch in a separate browser window.



Another measure you might consider is setting your page refresh setting to **Never**. This action will cause web pages that you visit to be cached on your computer hard drive, and the next time you access that same web page, it will launch immediately from your computer instead of slowly from the Internet. The downside of this approach is that you must remember to refresh the web page manually (by pressing the **F5 Key**) whenever you want to view the current version of that web page; otherwise, you might be reading an older version of the web page and not realize it.



To adjust this setting in the **Windows Explorer** browser, choose **Tools, Internet Options**, and click the **Settings** button in the **Browsing History** section. Check the radio button labeled **Never** under the **Check for newer versions of stored pages** and click **OK**.

## I Hope to See You Zoom

**Q** I use Excel 2003 and I sometimes find it difficult to read the small font in my worksheet. To make the worksheet more readable, I use the **View, Zoom, 200%** option, but I find it tedious to switch back and forth from 100% to 200% view. Is there a better approach that I am missing?

**A** In Microsoft Excel 2003, 2007 and 2010, you can zoom in and out instantly by holding down the **Ctrl** Key while **rolling the wheel** on your scrolling mouse. This approach is not only faster, but it also allows you to zoom up to a 400% view, down to a 10% view, and any option in between. This works in Microsoft Word too.

Microsoft Office 2007 and 2010 now include a new Zoom tool at the bottom right hand corner of the screen which accomplishes the same result.



## Heaven Help Us

**Q** I am new to Windows 7 and I really like the look and feel as well as the speed of this new operating system. However, I find myself apprehensive about learning to navigate another computer system. What can I do to learn the ropes as fast as possible?

**A** The features and functions of Windows 7 are similar to those in Windows XP; therefore, you are already familiar with these settings and tools. The trick is learning how to navigate Windows 7's redesigned menus. Microsoft constantly studies the way users interact with their computers and strives to improve the system to make it easier to use, and that is a good thing. Unfortunately, this means we must periodically relearn to navigate the new system and figure out where all of the Windows settings and controls reside. If you are willing to take on an advanced step, this tip may help. Microsoft has embedded a shortcut to all of the features and functions in Windows 7 which they refer to as **GodMode**. This mode is used internally by many Microsoft programmers and staff to quickly manage their Windows settings and controls.

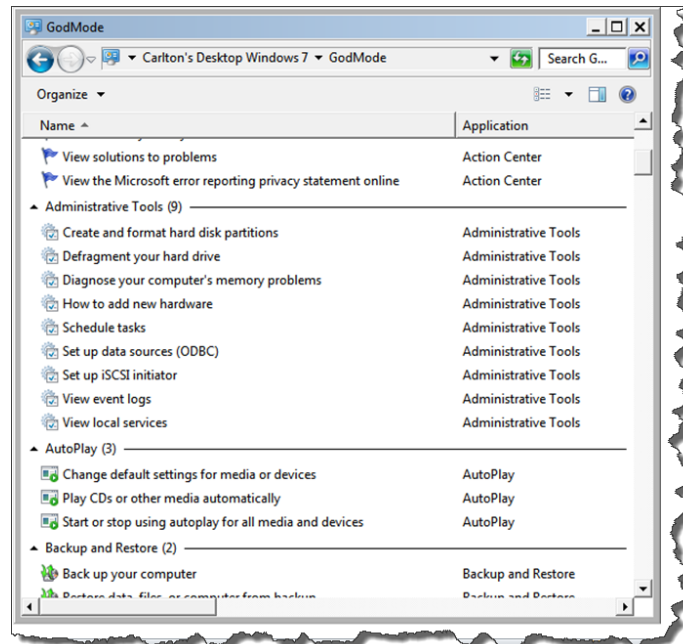
To set up GodMode in Windows 7, create a new folder on your desktop by right mouse clicking on your desktop and selecting **New, Folder**. Next, change the name of the new folder by right clicking on the folder, and select **Properties** from the drop down menu. Under the **General Tab** select the **Name of the Folder** text box and type in the following code to change the name of the folder:

**GodMode.{ED7BA470-8E54-465E-825C-99712043E01C}**

The folder will change in appearance from the default blank folder icon to the GodMode icon shown in the upper left corner of the screen below.



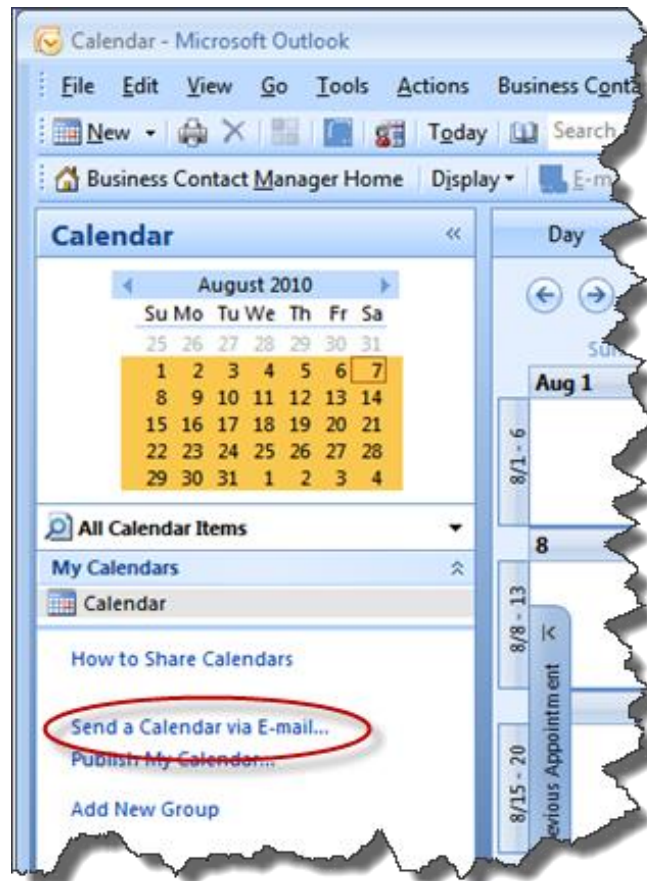
Thereafter, when you double click on the **GodMode** icon, a window will open containing a large collection of the popular controls, tools, features, and functions in Windows 7, including all Control Panel Tools, Administrative Tools, Gadgets, and much more. Because this window will allow you to view all the Windows 7 settings and controls in a single location, this might help you transition to Windows 7 a little easier. An example of the GodMode window is shown below.



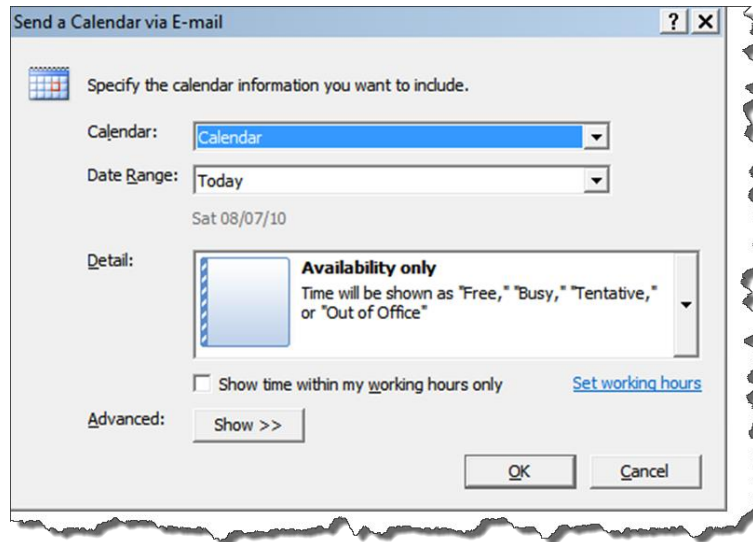
## Would You Like to Share A Date?

**Q** I work in a small CPA firm and my partners and I have busy schedules. We seem to waste a lot of time trying to coordinate our schedules which we all keep in Microsoft Outlook 2007. Our computer consultant has suggested that we set up a Microsoft Exchange Server so we can share our calendar information, but this measure is expensive and seems complicated. Is there a different approach that is easier and costs less?

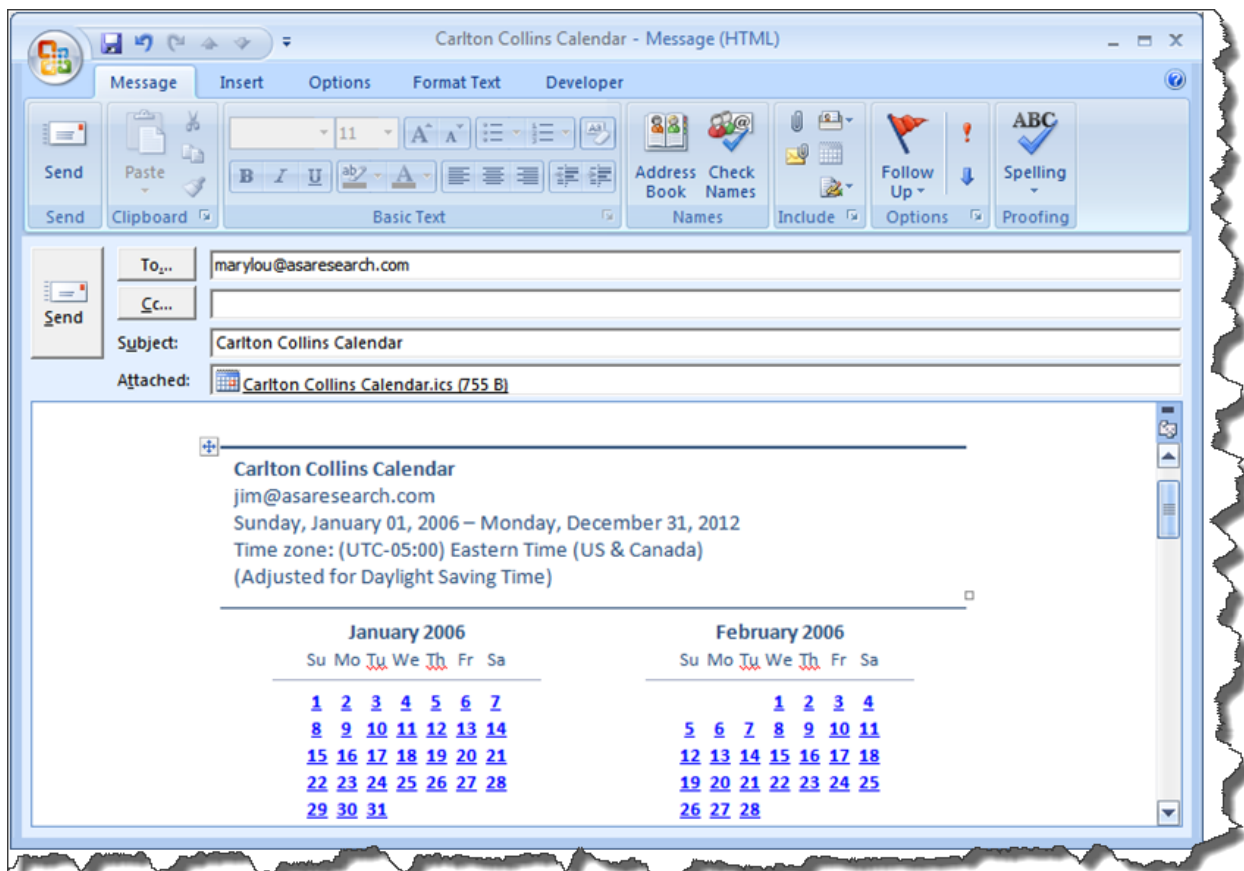
**A** While Exchange Server is a good solution which provides many advantages, Microsoft Outlook 2003, 2007, and 2010 provide an easy solution to this problem called **Send a Calendar via E-Mail**. To use this feature, open **Outlook 2007** and click on **Calendars** in the **Outlook Navigation Pane**. Select the option **Send a Calendar via E-Mail** as shown in the screen below.



This action will launch the **Send a Calendar via E-Mail** dialog box shown below. Select the date range you would like to send and click **OK**. (In your situation you will probably want to select the **Whole Calendar** option.)

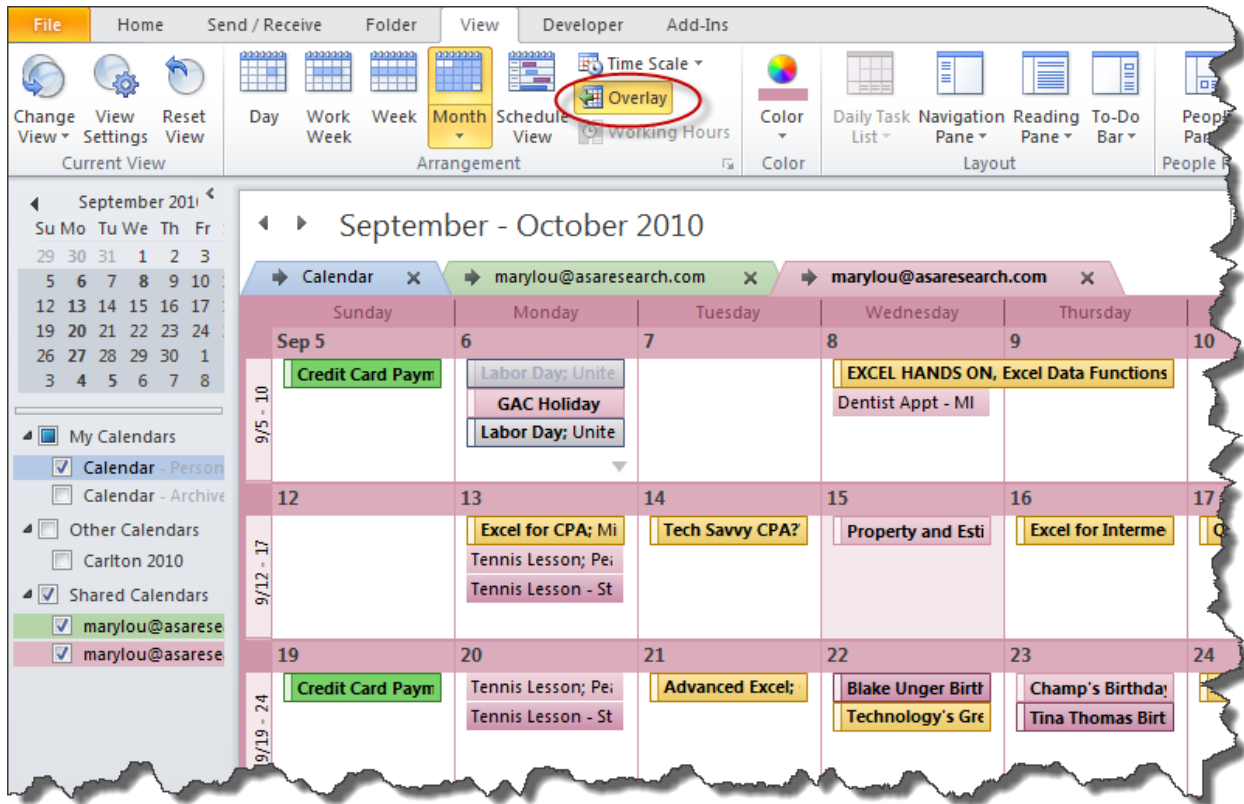


Outlook will compile your calendar into a file using the iCalendar format and prepare it for sending to your recipient. The resulting e-mail will appear as follows.



When the recipient receives and opens the e-mail containing the calendar information, a button labeled **Open this Calendar** will be displayed in the menu. Simply click the **Open this Calendar** button to display it side-by-side next to your calendar in Outlook or for a different

view, select the **Overlay** option from the **Arrangement** group on the **View** menu to display both calendars in **Overlay** mode as shown below.



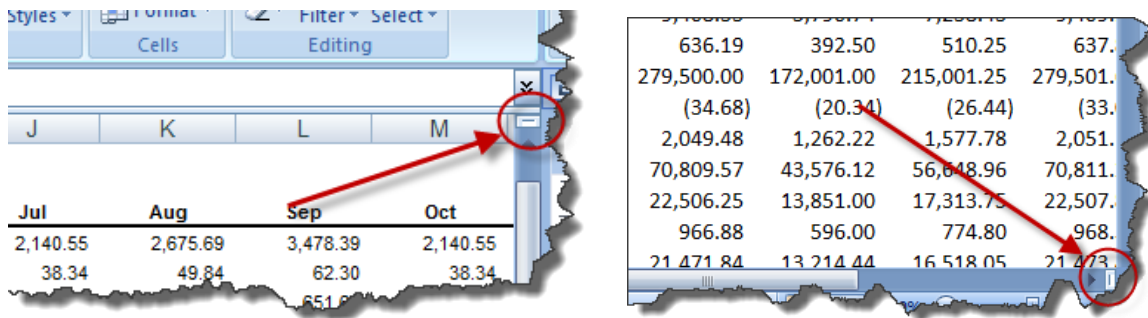
To complete the sharing process, have your partner share their calendar with you using this same procedure.

Note: The specific steps for using this **Send a Calendar via E-mail** tool are slightly different in Outlook 2003 and 2010, but essentially the same concept is employed.

## It's Time to Split

**Q** I have a large Excel worksheet and I need to be able to compare data throughout the worksheet. I've been using the **View, Freeze Panes** tool to temporarily freeze rows or columns so that I can view and compare data in different parts of the worksheet, but this method requires a lot of freezing and unfreezing. Is there a better option?

**A** Excel 2003, 2007 and 2010 contain two **Split Screen** tools which allow you to quickly split the Excel worksheet horizontally, vertically, or both. Like the Freeze Pane tool, the split screen tools also allow you to view and compare different portions of your data. To use these tools, click and drag the split screen tools to the desired positions. The **Split Screen** tools are located in the upper right hand corner and lower right hand corner of the worksheet area, as shown below.



In the example below the **Vertical Split Screen** tool has been used to display data for the 1<sup>st</sup> quarters of 2009 and 2010. (Notice that the columns jump from column E to column O). Additionally, the **Horizontal Split Screen** tool has been used to fix the column headings at the top of the worksheet. (Notice that the row numbers jump from row 3 to row 7.)

	A	B	C	D	E	O	P	Q	R	S
1										
2										
3		<b>Expenses:</b>	<b>1/31/2009</b>	<b>2/28/2009</b>	<b>3/31/2009</b>	<b>1/31/2010</b>	<b>2/28/2010</b>	<b>3/31/2010</b>	<b>4/30/2010</b>	
7		Contract Labor	26,654.80	34,651.24	43,314.05	29,320.28	24,255.87	38,982.65	26,654.80	
8		Contributions	1,282.53	1,603.16	2,084.11	1,154.28	1,442.85	2,292.52	1,026.02	
9		Dues And Subscriptions	6,051.13	7,866.47	9,833.09	7,866.47	8,653.12	8,849.78	5,446.02	
10		Equipment Purchase	370.96	463.70	602.81	482.25	370.96	602.81	296.77	
11		Equipment Rental	65.41	85.03	106.29	45.79	110.54	116.92	65.41	
12		Hardware Purchase	3,950.05	4,937.56	6,418.83	4,740.06	6,418.83	6,418.83	4,740.06	
13		Insurance	11,697.00	15,206.10	19,007.63	12,866.70	18,247.32	13,305.34	11,697.00	
14		Marketing Giveaways	1,184.87	1,481.09	1,925.41	947.90	1,332.98	2,503.04	1,540.33	
15		Memberships	90.00	117.00	146.25	99.00	105.30	146.25	90.00	

## Help, I Can't Click Back!

**Q** Sometimes when I am browsing the internet, I notice that when I click on a hyperlink and then click the **Back** Button to return to the previous page, it doesn't take me back. Am I doing something wrong?

**A** You are not doing anything wrong. This is a nasty trick some web developers play. What's happening is some web pages load and then refresh automatically, so the effect is that the web page loads twice. Therefore when you press the **Back** Button, it actually works correctly, but it only takes you backward one page to the first instance of the same web page you are already viewing. You can often overcome this problem by **double-clicking** the **Back** Button to travel backward by two web pages quickly.

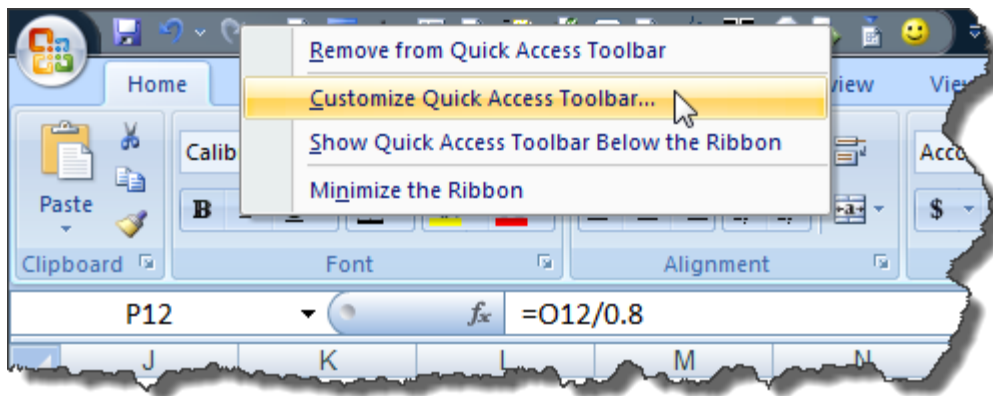


(Tip: You must double-click quickly so the first page backward does not have time to refresh again.)

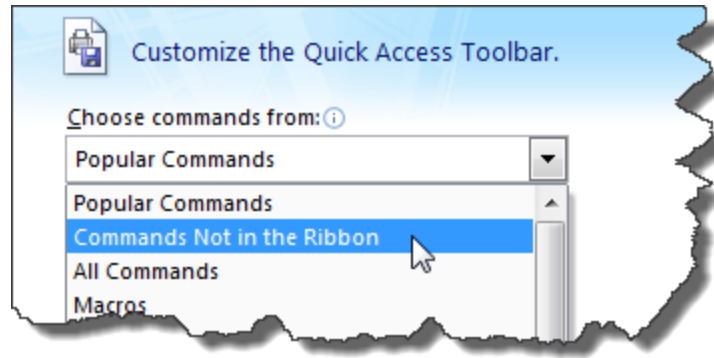
## I Command You

**Q** Recently, I upgraded to Excel 2007 and I can't seem to find all of the same commands I used in Excel 2003, such as the ability to e-mail a single worksheet or pivot multiple ranges of data. Why did Microsoft get rid of some of Excel 2003's commands and are there any good work-around procedures for these missing capabilities?

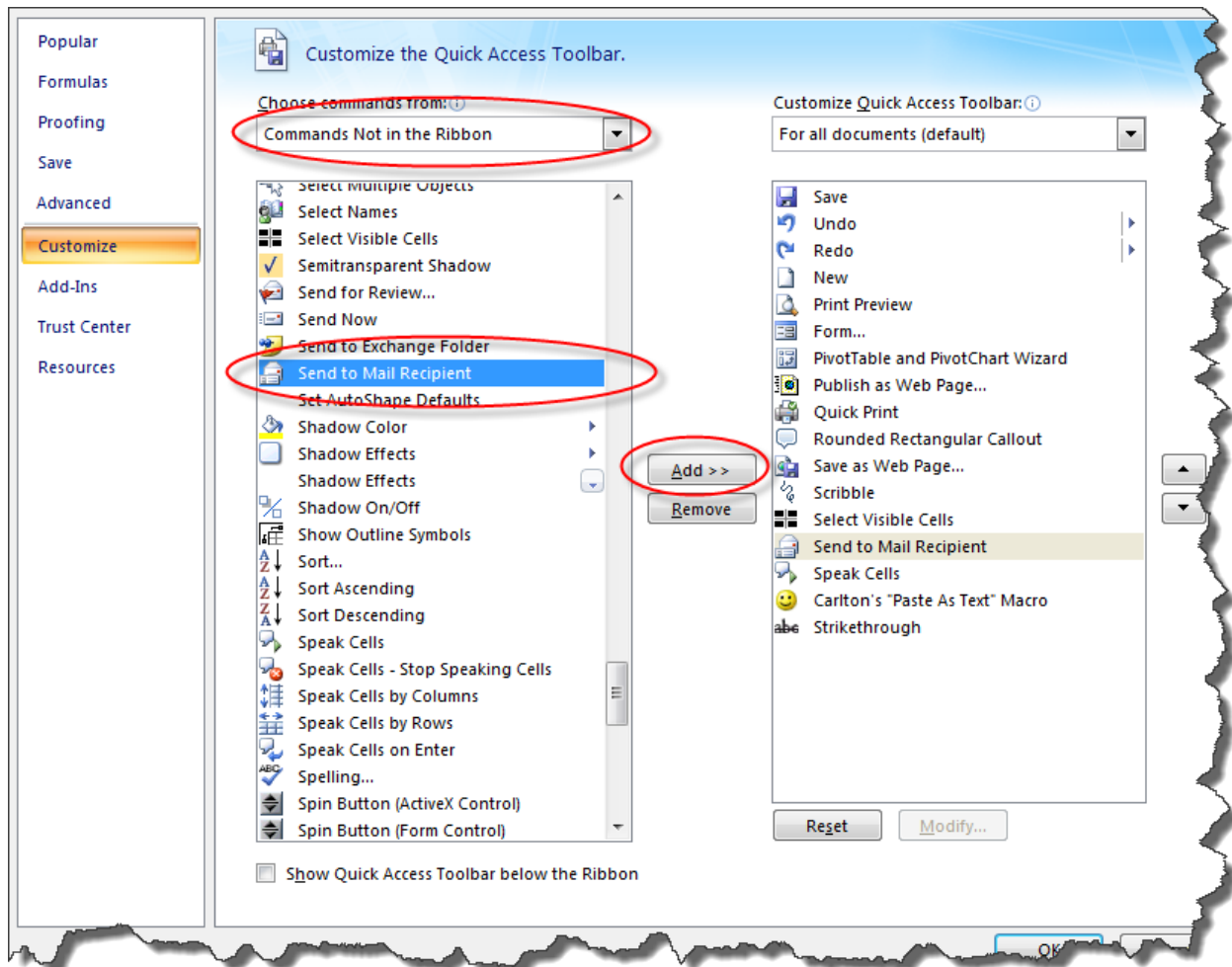
**A** The missing functionality you mention is still there in Excel 2007 and 2010, but it is hidden. When Microsoft redesigned the menus for Excel 2007 and 2010, they excluded 219 commands from the newer menu ribbon. To view a complete list of these hidden commands follow these steps: Start by right-mouse clicking on the **Quick Access Toolbar** and choosing the option to **Customize Quick Access Toolbar**.



Next, in the **Choose commands from** drop down box, select the option to view **Commands Not in the Ribbon**.



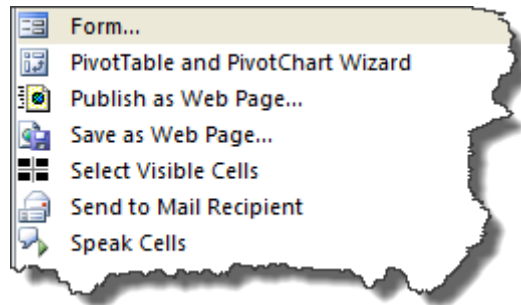
This action will display the list of 219 commands not included in the ribbon on the left side of the dialog box, and those commands that are included in your Quick Access Toolbar on the right side of the dialog box.



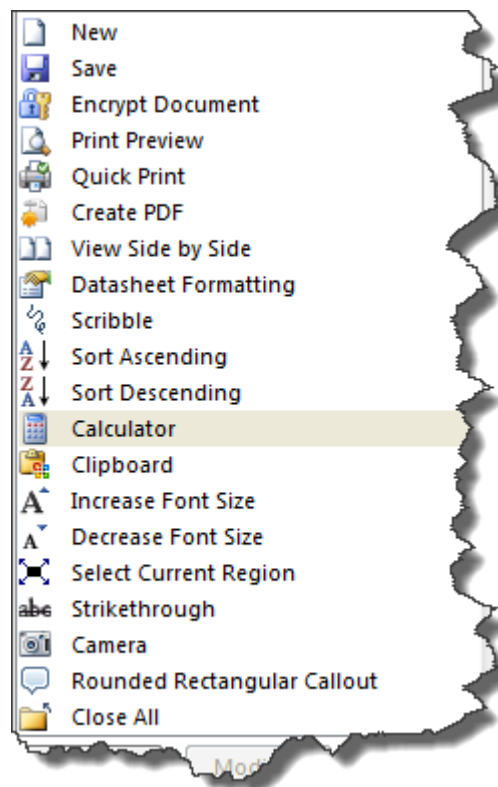
To access these hidden commands, you must first add them to your **Quick Access Toolbar** by highlighting the desired command in the left column, and clicking the **Add>>** button to include it in the right column. Most of the hidden tools are obscure and seldom used, however some of



them are among my favorites. The seven Excel 2003 commands that are most notably missing from the Excel 2007 and 2010 menu ribbon are shown below.



While the particular commands you choose to add to your Quick Access Toolbar will depend on personal preference, I recommend that you add the above mentioned commands to your Quick Access Toolbar, as well as the following twenty additional commands which I personally find more useful, to make them easily assessable.



Note: There are a few Excel 2003 capabilities that have disappeared from Excel 2007 and 2010. For example:

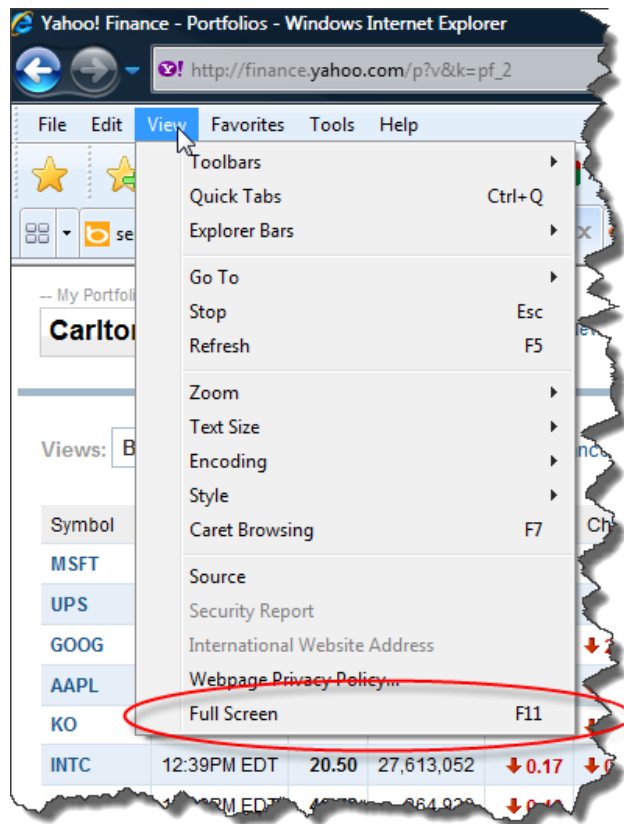
1. You can no longer publish web pages in an interactive format (The interactive format command in Excel 2003 allows you to publish HTML pages in which readers can input data directly via their browser).

2. Embedded video clips and sound clips no longer play as embedded objects in Excel 2007 and 2010; instead those clips are played in your computer's default media player application.
3. There is no longer an auto format option which automatically highlights your subtotal rows.

## Full Screen Ahead

**Q** When browsing the internet I like to hide my browser's menu and toolbars by right mouse clicking on the toolbar and unchecking the various menu and toolbar check boxes. This gives me more room to view the web page. However, it is a hassle to constantly remove and restore the toolbars like this. Is there a faster way to hide the browser's toolbars?

**A** There is a better way. Simply select **View, Full Screen** from the browser's menu, or as a shortcut press the **F11 Key**. Either way, this action will hide all toolbars and display the full screen on your monitor. To restore the browser toolbars, simply press the **F11 Key** again.



Note: There is a catch. Windows Internet Explorer will only allow you to apply the Full Screen setting to one browser window at a time. In other words, if you choose Full Screen in one

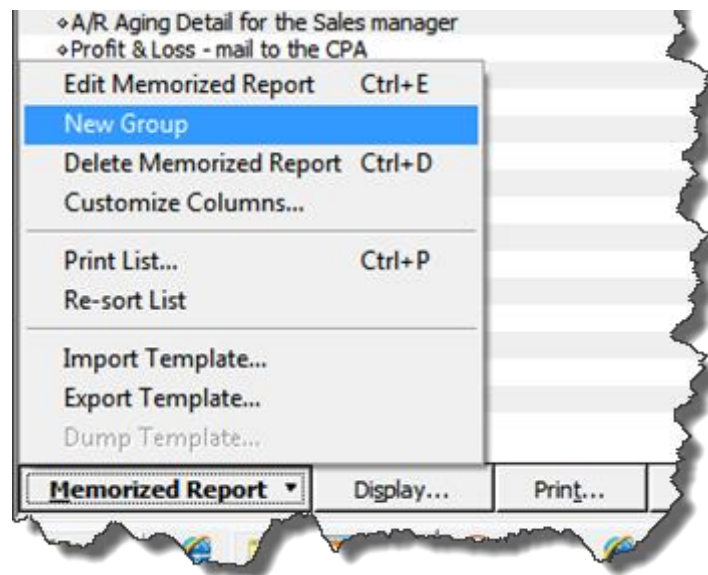
browser window, you won't be able to choose Full Screen in another browser window at the same time.

## I Report to Inform You...

**Q** Our bookkeeper uses QuickBooks and she does a nice job; however I can't get her to produce and distribute the necessary reports each day, week and month for our staff to use in order to properly manage our business. She says that she has too much work to constantly print the reports that I would like to see circulated throughout the organization on a recurring basis. Is this a common problem and how much time should it normally take to produce the typical reports for the average company?

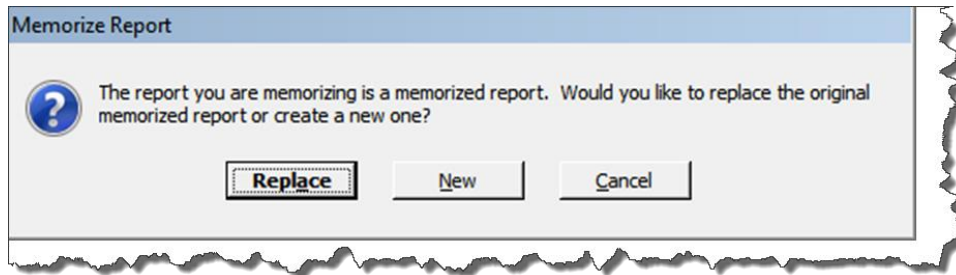
**A** First of all, congratulations on understanding the importance of the reporting process; your accounting system should function exactly as you described. However your bookkeeper is correct too, it does take a great deal of time to produce all of the required reports, even for a smaller sized business. QuickBooks provides a good solution called **Process Multiple Reports** which could solve your problem. Here's how it works:

1. Start by opening your Memorized Report List in QuickBooks by selecting **Reports, Memorized Reports, Memorized Report List** from the QuickBooks Menu. Next click the **Memorized Report** button in the bottom left corner of the Memorized Report List (shown below) and select **New Group**. Name the new group **Month End Reports** and then select **OK**.

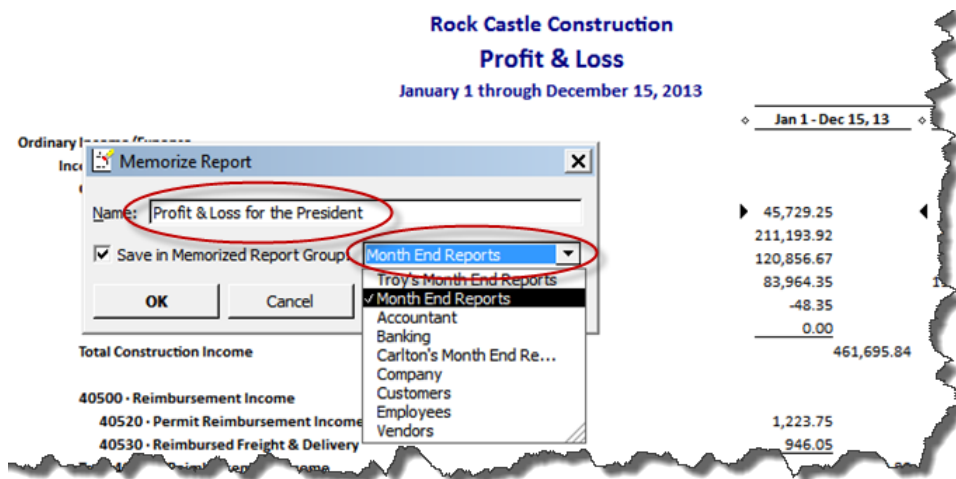


2. Next, open each report that you would like to produce at month end and memorize that report into the new **Month End Reports Group** as follows:

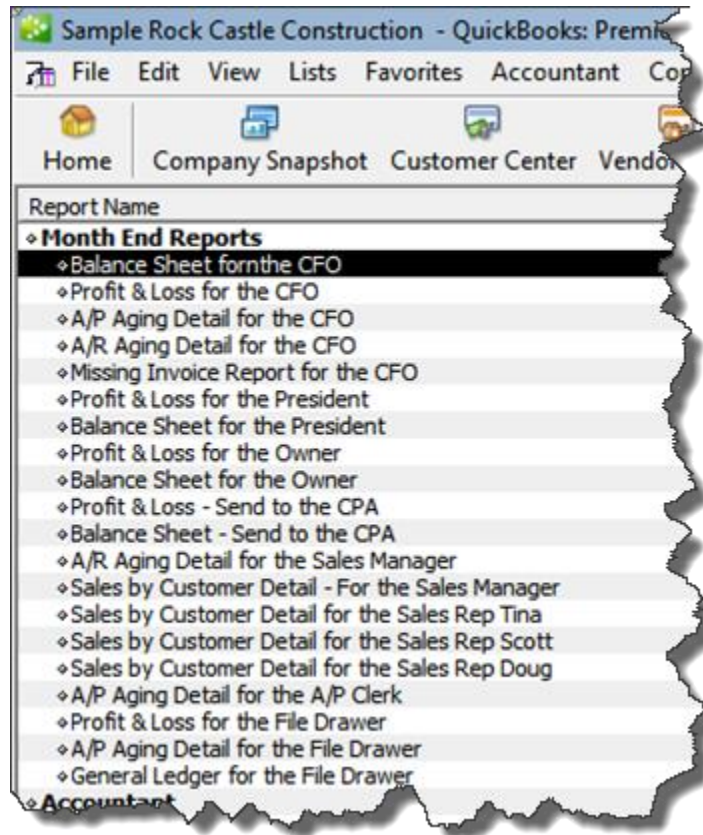
- a. Launch a report that you want produced each month;
- b. Customize that report to include the desired columns, date ranges, filters, etc.;
- c. Click the **Memorize** button and if asked, then click the **New** button;



- d. Edit the **Name** of the report to also include the name of the intended recipient of the report as circled in the screen below. Check the check box titled **Save in Memorized Report Group** and select **Month End Reports** from the drop down box, then select **OK**.

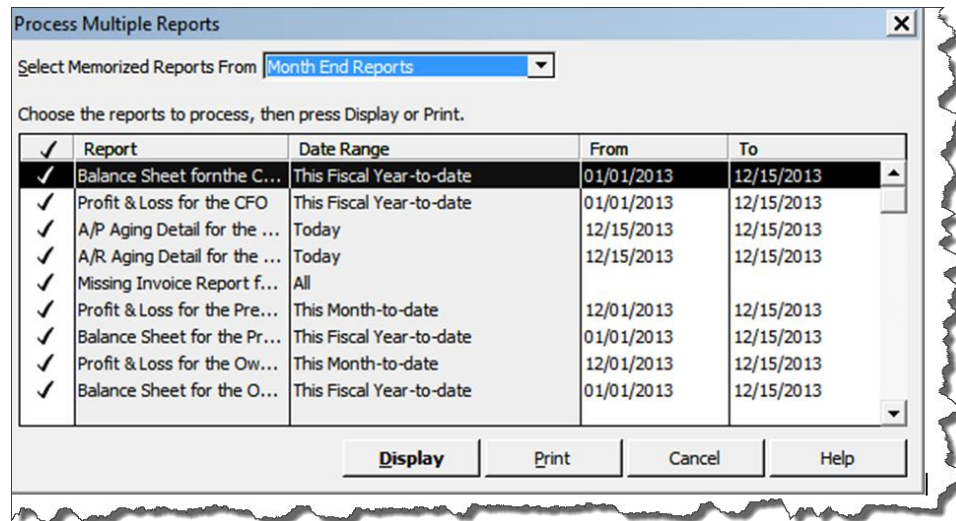


- e. Repeat the above process until you have memorized each report to be produced at month end, including duplicates of the same report for distribution to different personnel. Be sure to include the name of the intended recipient in the report title name so it will be easier for a staff person to distribute the printed reports. Ultimately the goal is to build a group of memorized reports similar to the example shown below:



Tip: You can rearrange the order of the reports by clicking and dragging the small diamonds to the left of each report name so the reports will print in collated order for easier distribution.

- f. At month end when the time comes to produce the reports, select **Reports, Process Multiple Reports** from the **QuickBooks Menu** to display the **Process Multiple Reports** dialog box shown below.



Select the desired group to be printed from the **Select Memorized Reports From** drop down box at the top of the dialog box, and click the **Print** button.

Tip: For those that would like to distribute electronic reports rather than paper-based reports, you can choose to print to Adobe Acrobat PDF or Excel formats, and then e-mail the reports as attachments.

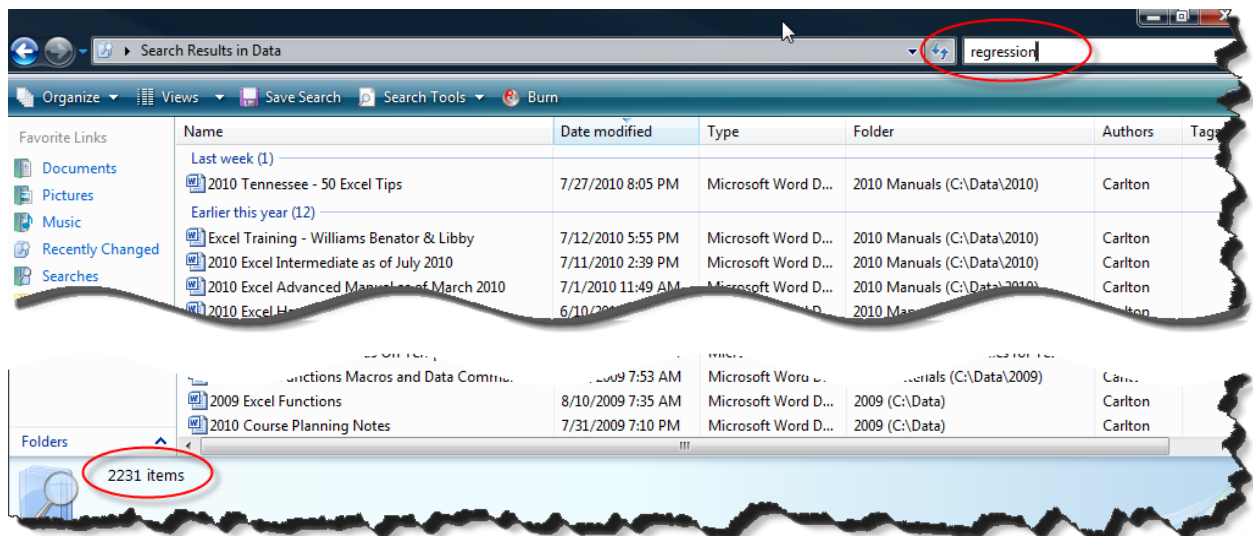
## Say Goodbye to Wimpy Searches

**Q** I find myself frequently wasting time by launching and closing data files in an effort to find the one I am looking for. My friend has suggested that I re-organize my files in various folders instead of the single data folder I use now, but that is going to take a lot of work. Is this a good approach or is there a better approach to finding the files I am looking for?

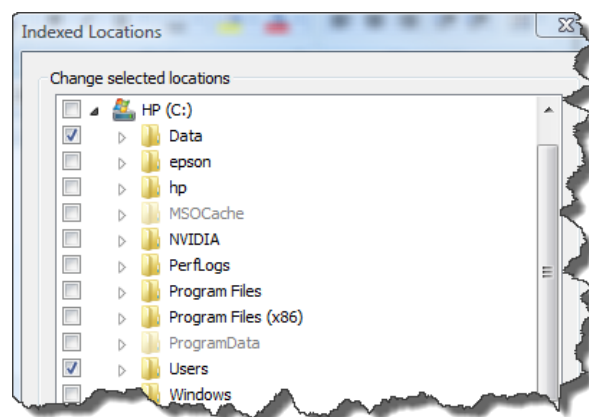
**A** Organizing your files in various file folders used to be the right approach, but that measure is now less necessary because Windows Vista and Windows 7 both provide a tool called **Instant Search** which can search all of your files in just a few seconds. Instant Search uses “indexed searching”, which is the same search method used by internet search engines such as Google and Bing. Specifically, Instant Search scans and indexes all of the documents and files on your computer and builds a giant index of every word. Thereafter, when you search your computer, the system searches the index to quickly locate the files you seek and provides hyperlinks to those files.

Indexed searching is significantly faster than the search tool included in Windows XP. (If you have ever wondered why it takes only two seconds to search billions of pages on the internet, but 10 minutes or longer to search the files on your Windows XP computer, indexed searching is the reason.)

To use Instant Search open an **Explorer Window** by right mouse clicking on the **Windows Start Button** and choosing **Explore** in Windows Vista, or **Open Windows Explorer** in Windows 7. Browse to the desired drive or folder, and enter your search terms in the **Search Box** located at the top right hand of the screen. Within seconds, Instant Search will list every file and folder that contains your search terms in the file or folder name, file contents, or properties. For example, in the screen below I have browsed to my data folder and typed in the phrase “regression” in the search box . In about two seconds Instant Search displays 2,231 data files that contain the phrase “regression”. (If I don’t find the exact file I want immediately, I can use additional search tools to narrow my results. Keep reading below to learn about these additional search capabilities.)



Note: By default, Windows Vista and Windows 7’s Instant Search tool only indexes and searches those files in your Documents Folder. If you save data files elsewhere on your computer, you can direct Instant Search to also index those additional drives or folders by selecting **Indexing Options** from the **Control Panel** and then click **Modify, Show All Locations**, and place a check mark next to drives or folders that you want included in your search index.



**For Windows XP Users** - If you are still using the Windows XP operating system, but you would like to perform the same type of fast indexed searching that Windows Vista and Windows 7 provide, you can download and install the **Google Desktop** for free at this web address: <http://desktop.google.com/en/?ignua=1>. By default, Google Desktop will index all of the files on your computer.

Note 1: Both Instant Search and Google Desktop can also index and search your e-mails for fast searching.

Note 2: You can adjust the settings to direct both Instant Search and Google Desktop to include other computers and files servers in the indexed search.

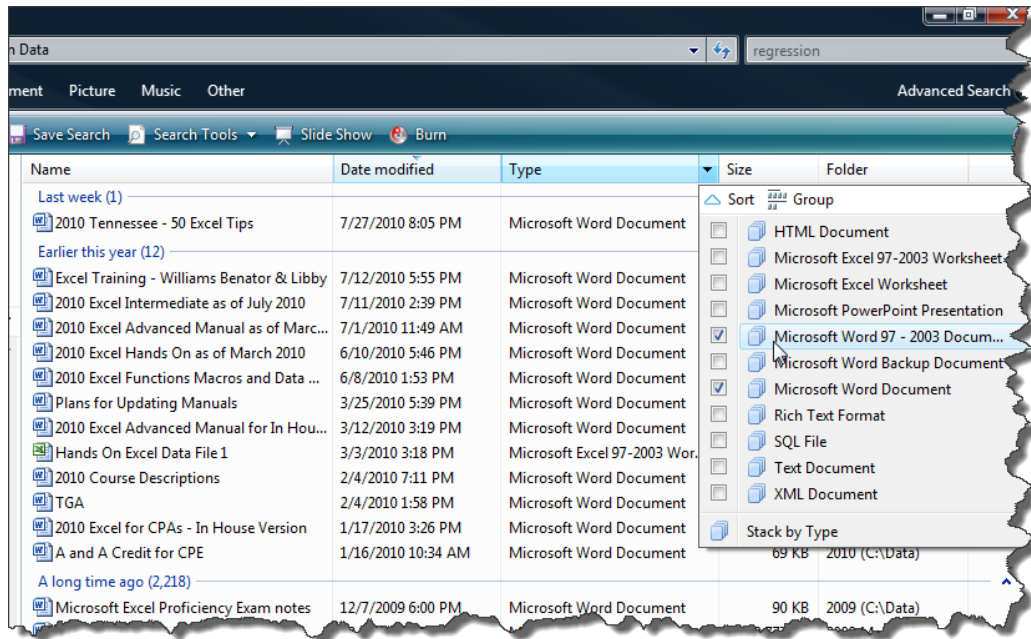
Note 3: Both Instant Search and Google Desktop will take time to index all of your files, perhaps overnight. Thereafter, new files that you create are indexed automatically as they are created.

## The Search for a Better Search

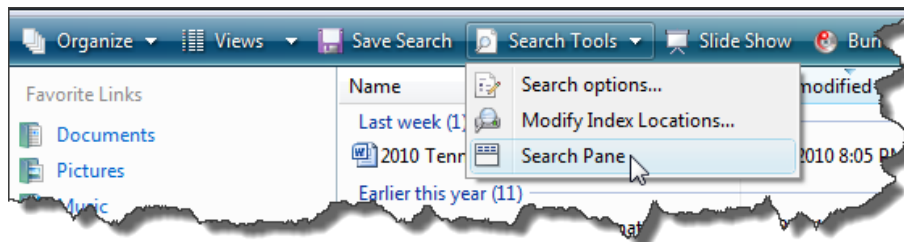
**Q** Our CPA firm has more than 400,000 data files on the file server and we constantly struggle to locate the right file. For example, recently an audit staff retrieved an Excel file which contained fixed assets and depreciation calculations and used this in the audit. Unfortunately the version of the file retrieved was not the most current and as a result, additional time was wasted updating the older file. We hope to avoid problems like this in the future. What is the best way to manage such a large volume of files?

**A** The previous question above addressed the concept of indexed searches, but let's dig a little deeper into this subject. The **Explorer Window** provides additional searching capabilities to help you quickly view and narrow your search results. Continuing with the example from the previous question, I can further refine my search results by clicking on any column heading to view filter options. As an example, in the screen below I have clicked the **Drop Down** arrow next to the **Type** column heading. This action "stacks" the data files according to "type of file". Notice that I have many file types containing the word "regression" including Excel 2003 and 2007, Word 2003 and 2007, HTML, PowerPoint, XML and others.

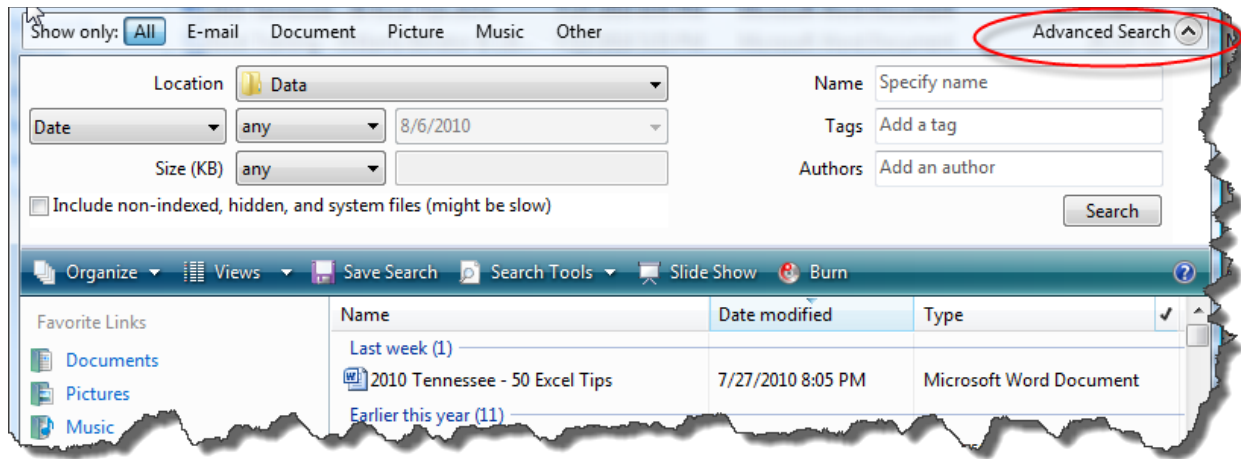




Selecting specific file types (Word 2003 and 2007 files in the example above) further narrows my search results. If I still need a more refined search, Windows Vista and Windows 7 offer **Advanced Search**. To access the Advanced Search tool click the **Search Tools Drop Down Arrow** in the Windows Explorer Title Bar, and select **Search Pane** as shown below. (Note: This option will only be visible in the Explorer Title Bar after you have started a search by typing a search term in the search box).



Next in the **Search Pane** click the **Advanced Search Arrow** to display the **Advanced Search Panel** containing additional search options as shown below.

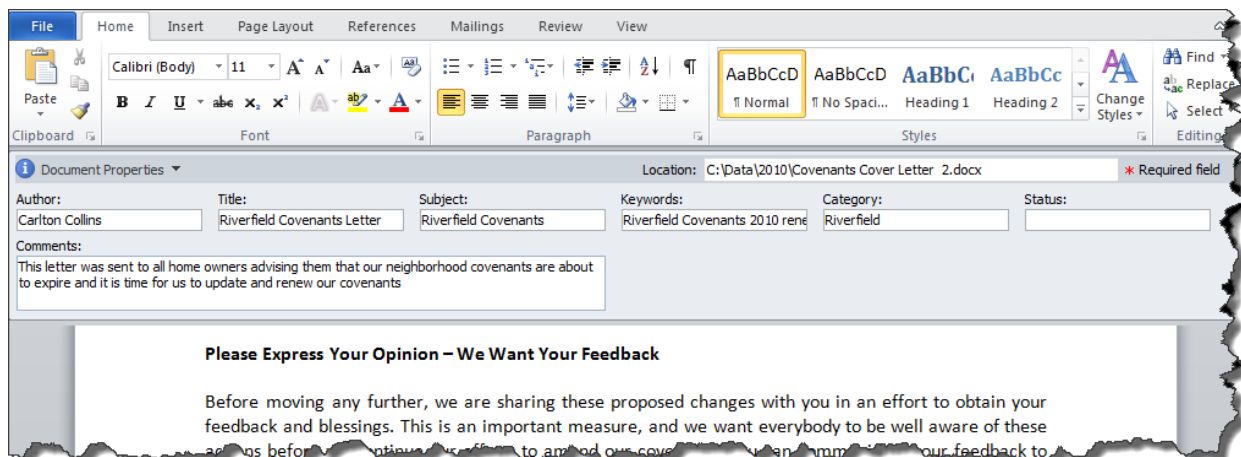


These advanced options will enable you to search by specific date ranges, file sizes, file names, author's names, and tags.

To fully utilize the advanced searching capability, it is helpful to add document properties to your data files. You can access the document properties in Microsoft Word as follows:

- Word 2010** - Select **File, Properties, Show Document Panel**;
- Word 2007** - Select **Office Start Button, Prepare, Properties**; and
- Word 2003** - Select **File, Properties**.

The documents properties panel (example shown below) will allow you to insert keywords, authors, titles, and comments.



The **Document Properties** you add will be used by the **Instant Search** function to not only locate files, but also to sort the resulting files in priority order according to those that most closely match your search criteria. This type of search could have helped your audit staff locate all of the client's fixed asset depreciation files on your file server, enabling them to select the most current one from the list.

## Picture This

**Q** I recently spent some time looking through my daughter's Facebook page with her and I saw several photographs posted by her friends that I would like to keep, or perhaps print for my own photo albums. Can this be done, and if so how?

**A** If you see a picture you like (on Facebook, Flickr, MySpace or any web page), you can save that picture to your computer by right clicking on the picture and selecting **Save Picture As**. Then browse to the folder where you want to save the photo and label it using an appropriate name so it will be easy to find in the future. That way you will always have those pictures to view, print or share.



Note: While most social media web site users are probably happy to share their photos with you, you should avoid making copies of pictures posted by professional photographers. If there is any doubt, ask permission first.

### Dating Tips

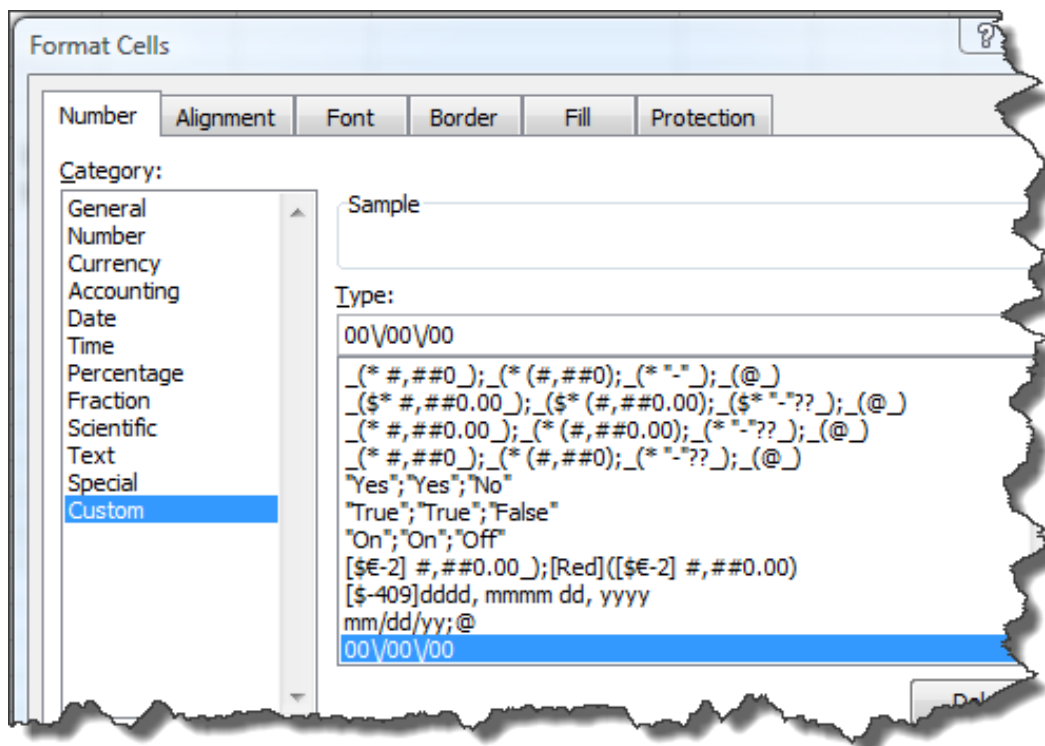
**Q.** When entering dates in Excel, it would be much simpler if I could enter the date as just the numbers without the forward slash character – 061010 or 06102010 instead of 06/10/10 or 06/10/2010. Entering the slash makes the exercise a two-handed exercise instead of one-handed exercise via the numeric keyboard. Is there a way to enter data into just one cell so I can avoid using multiple cells and then concatenating?

**A.** You can enter dates into Excel 2003, 2007 and 2010 without using slash marks by applying a custom format. Start by highlighting the range of cells and right-mouse click on that range to display the pop-up menu. Select **Format Cells** to display the **Format Cells** dialog box. On the **Number** tab select **Custom**, and enter the following custom format in the **Type** box: **00\00\0000**, then click **OK**. (Because the forward slash has special meaning in a custom

format, you must precede it with a backslash for Excel to recognize the slash mark as a literal character, not its special meaning.) Thereafter, dates entered without slash marks will display slash marks, and the date will behave like a date instead of text. An example is shown below.

	A	B	C	D
1	Invoice #	Customer	Date	Amount
2	4480	Champ's Fertilizer Co.	06/10/10	\$456.18
3	4481	Molly's Cleaning Services	06/14/10	\$182.55

Once created, Excel remembers the custom format so you won't have to create it again in the future.

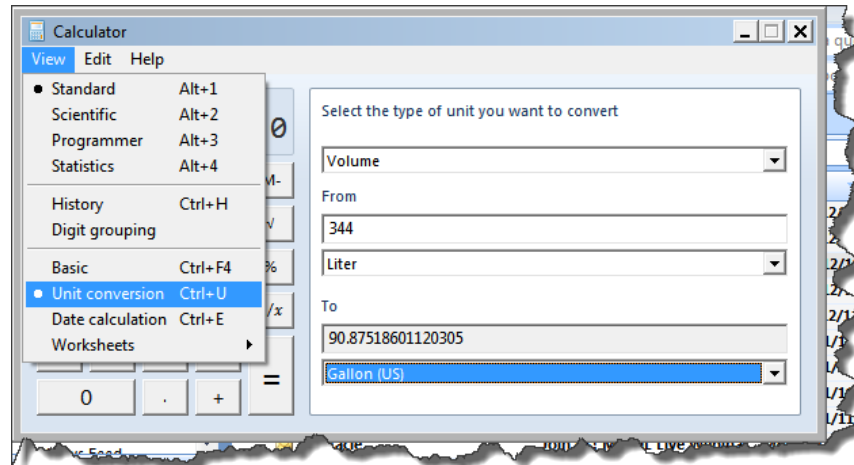


**Hint:** To display dates without the preceding zeros, use this custom format. **##\##\##**.

### Count On It

**Q.** We import commodities from around the world and frequently need to convert weight and volume measurements from metric system to United States customary measurements (for example, liters to gallons and meters to feet). Last year we purchased Windows 7 computers and developed Excel templates to help meet this need, but we have recently discovered that some of the Excel templates contain errors and other templates are not being used correctly. I would like to drop our spreadsheet-based solution and use an easier tool to get the job done. Can you recommend a decent solution?

**A.** The Windows 7 Calculator includes new functionality, including unit conversion capabilities that could meet your needs. To use this tool, launch the Calculator by clicking the **Start** button, **Accessories, Calculator**. In the Calculator, select **Unit Conversion** from the **View** menu as shown below.



Next, select an option from the **Select the type of unit you want to convert** box which includes the following option: angle, Area, Energy, Length Power, Pressure, Temperature, Time Velocity, Volume and Weight/Mass. In the **From** box, enter an amount and select the appropriate unit of measure using the **drop down arrow**. In the **To** box, use the **drop down arrow** to select the target unit of measure and Calculator will display the converted unit of measure.

**Hint:** The Windows 7 Calculator also has new functionality for calculating mortgages, vehicle leases, and dates in addition to new programmer and statistic modes.

## Hide Me Quick

**Q.** I am constantly hiding, un-hiding and re-hiding columns to generate reports in a multitude of report layouts, and I can't figure out how to display only the hidden column that I need without having to display all my hidden columns? Can you help?

**A.** Because hiding and un-hiding columns is a frequent task for many CPAs, I will address your specific question, and then offer a different solution. To unhide a specific column in Excel 2003, 2007 or 2010, press the **F5** key to launch the **Go To** dialog box and type in any cell address within that column (such as G1), and click **OK**. This will place your cursor within column G, even if hidden. Next, type the keyboard shortcut sequence **Alt, O, C, U** to unhide the column.

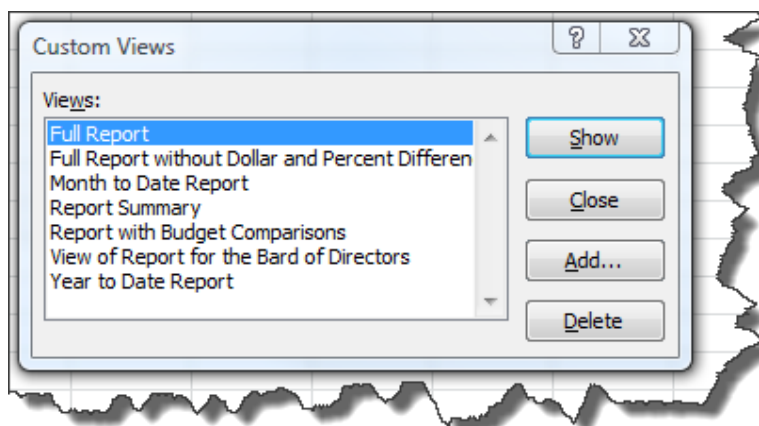
**Alternatives** – There are many alternatives for un-hiding columns, several of which are presented below so you can use the approach that work's best for you.

1. **Menu Options** - To unhide a column using the menu in Excel 2007 and 2010, from the **Home** tab, select **Format** from the **Cells** group, **Hide & Unhide, Unhide Columns**. To unhide a column using the menu in Excel 2003, select **Column, Unhide** from the **Format** menu.

2. **The Traditional Unhide Shortcut** - In Excel 2003, 2007 and 2010, Windows XP users can unhide a column by typing **Ctrl + Shift +)**, but this keystroke combination appears to be inactive in Windows Vista and Windows 7.
3. **Column Width** - Instead of un-hiding a column, you could simply increase the column width to make it visible. Start by pressing the **F5** key to open the **Go To** dialog box and enter a cell address to go to a hidden column. To resize column widths in Excel 2007 and 2010, from the **Home** tab, select **Format** from the **Cells** group, **Column Width**, enter the desired width, and click **OK**. To resize a column width in Excel 2003, from the **Format** menu select **Column, Width**, enter the desired width, and click **OK**.

**Advanced Hint:** To make your task easier, assign a name to a cell in each column you wish to hide or unhide using the **Name Box** (located just above the Column A heading). For example, you might assign the name **YTD** to cell G1, and the name **Budget** to cell H1. This will make it easier for you to use the **Go To** command because the name makes it obvious which column is which, whereas you might have a difficult time remembering which column label is which. Further, you could also use the **Name Box** to assign a name to a group of columns, and use the same procedure described above to hide or unhide that group. For example, you might assign the name **PriorYear** to cells J1 thru M1, and use the **Go To** command to go to those columns and unhide the entire lot.

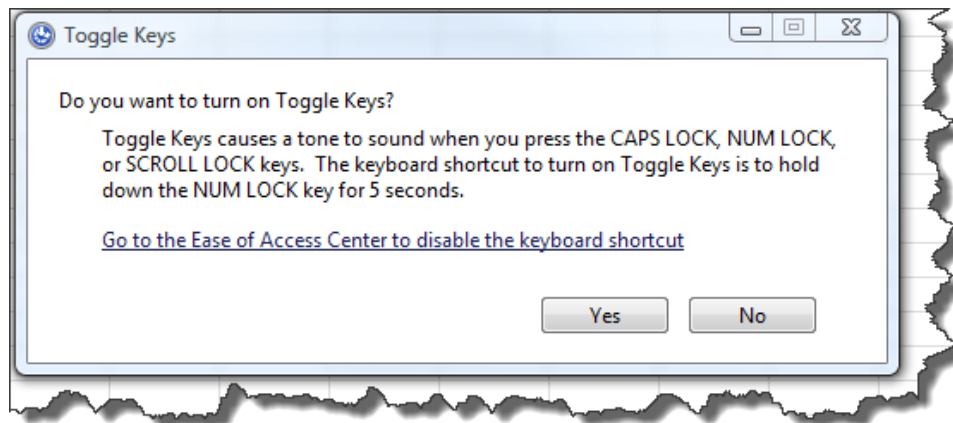
**A Better Suggestion** - Rather than constantly hiding and un-hiding columns, a better approach would be to use the **Custom Views** feature in Excel 2003, 2007 and 2010. By creating custom views, you can easily toggle back and forth between all of your views. To create your first custom view, unhide all of your columns and from the **View** tab (or **View** menu in Excel 2003), select **Custom Views**. Click the **Add** button and enter a description in the **Name** box, then click **OK**. Next, hide various columns in your workbook and repeat these steps to create a second view of your data that includes selected hidden columns. Continue to create additional custom views for each of your desired hidden column layouts. Thereafter, you can reduce or eliminate the need to hide and unhide columns in the future by simply changing the view. To toggle between custom views, from the **View** tab by select **Custom Views** in the **Workbook Views** group, and double click the desired custom view as shown below.



## Caps Off to You

**Q.** Caps really bug me. It seems that I never know when I have the caps lock turned on. I think it changes by itself! Is there an app for Windows which easily alerts (by sound would be nice) that the caps lock is on? Is there an EASY WAY TO CONVERT (whoops, didn't know it was on) from caps to lower case in word, and also when I am in "reply" mode to an e mail without HAVING TO RETYPE?

**A.** Most keyboards provide a light that lets you know when Caps Lock is turned on; if yours does not, you might consider upgrading your keyboard. To hear a sound when Caps Lock is turned on in Windows XP, Windows Vista or Windows 7, launch the **Toggle Keys** dialog box by holding down your **NUMLOCK** button for five seconds, and click **Yes**. Thereafter, a loud beep will sound through your computer's speakers whenever Caps Lock is turned on or off. (To turn **Toggle Keys** off, once again hold down your **NUMLOCK** button for five seconds.)



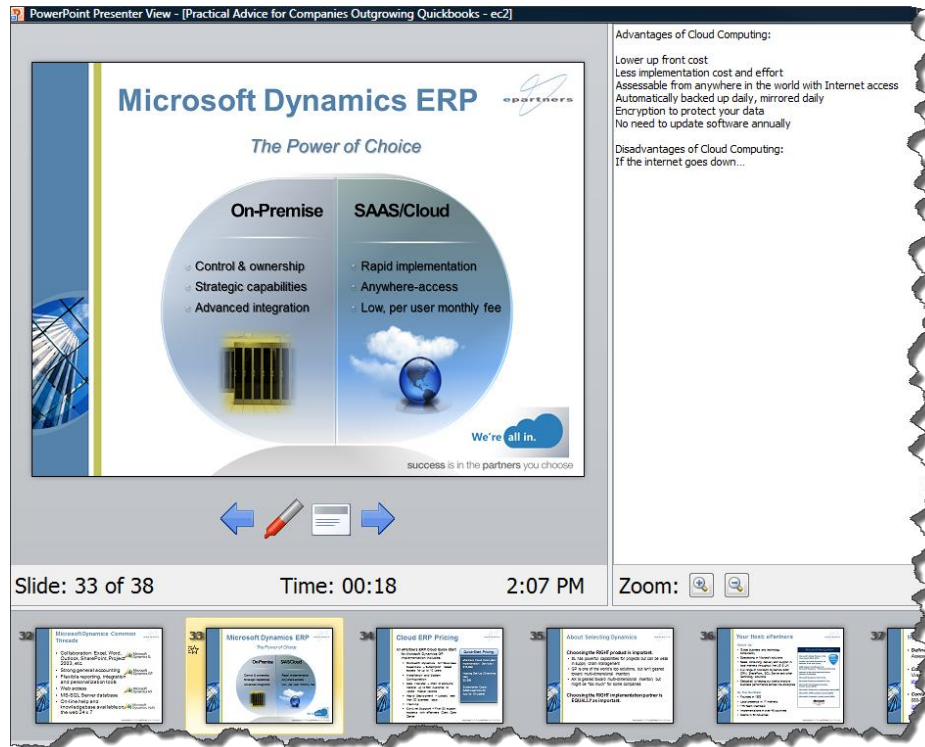
If you do accidentally use the wrong case when typing, you can change the case by highlighting the affected words and pressing **Shift + F3** to toggle between **proper**, **upper**, and **lower case** characters. This works on single words, sentences, paragraphs and even across multiple pages. As for the spooky **Caps Lock** changing by itself, it is most likely that you are pressing the Caps Lock key by accident. Using Toggle Keys may help you isolate the cause of this problem.

## Powerful Points for PowerPoint

**Q.** I have an interview scheduled for a new position that will require me to produce numerous presentations using PowerPoint 2010. I have used PowerPoint 2003 a little, but I need a crash course on some advanced functionality to help me better understand the product. Can you direct me towards five or so useful PowerPoint features that I can quickly study that will help me get up to speed on this product?

**A.** Presented below are a handful of my favorite PowerPoint features that might help you elevate your PowerPoint knowledge to the next level.

1. **Presenter View** – The Presenter View allows you to view your slide show along with your speaker’s notes on your computer, while projecting only the slide show to the screen for the audience. The result is that you can see your detailed notes that accompany each slide, and the audience cannot. The Presenter View also displays the time spent on each slide and thumbnails located at the bottom of the Presenter View screen allow the speaker to see the previous and next slides, at a glance.

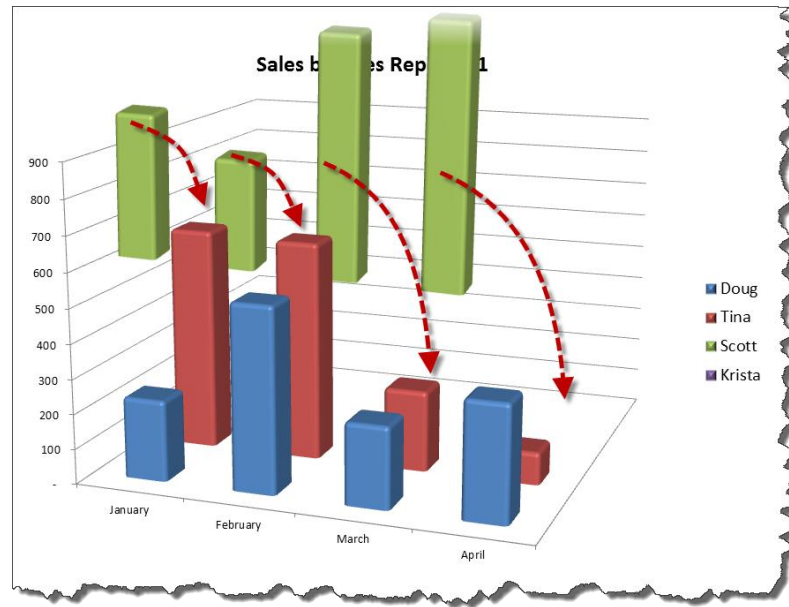


To display a slide show using the Presenter View in PowerPoint 2007 and 2010, check the **Use Presenter View** checkbox on the **Slide Show** tab, and begin your slide show. In PowerPoint 2003, select **Slide Show, Setup Show**, check the **Show Presenter View** checkbox, and begin your slide show.

2. **Animate Charts by Data Series** – PowerPoint 2010 allows you to animate your charts by data series as follows. Start by creating a chart in PowerPoint, or if you prefer, copy and paste a chart from Excel into PowerPoint. **Click** on the chart to **select it**, and click **Animation Pane** from the **Animations** tab to display the Animation Pane. Again, with the chart still selected, from the **Animation** tab, click **Add Animation** and select an **Entrance** animation such as **Bounce**, for example.

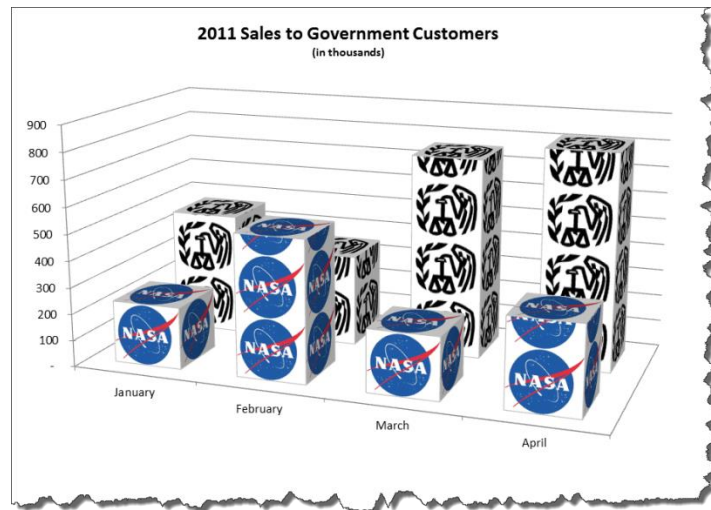
In the **Animation Pane** click the **drop down arrow** next to the animation and click **Effect Options** to open the **Bounce** dialog box. Next, on the Chart Animation tab, click the **Group chart drop-down arrow** and select **By Series**, and click **OK**. Thereafter, when you display the slide show, each data bar series will bounce in individually, helping your audience identify the specific data series you are discussing. The screenshot below depicts the data series for sales representative Scott as the bars are bouncing into position.





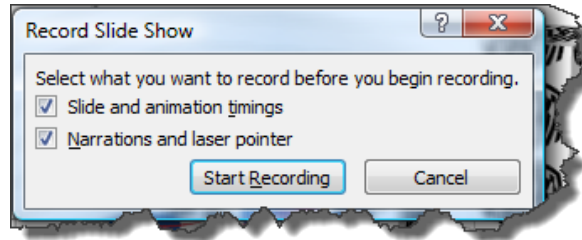
**Hints:** The ability to animate charts by data series first appeared in PowerPoint 2007, and the instructions are similar, but not identical to those described above. This feature is not available in charts that contain links to other applications, such as Excel.

3. **Fill Charts with Employee Pictures or Customer Logos** – PowerPoint 2003, 2007 and 2010 allow you to fill data bars and pie slices with pictures to produce a chart that is often easier to read. To fill a data series, right mouse click on a data bar series to select that series, and select **Format Data Series** from the popup menu. In the **Format Data Series** dialog box, select **Fill, Picture or texture fill**, and click the **File** button. Browse to the desired picture or image and click **Insert**. If desired, select the **Stack** radio button to stack multiple copies of the picture within the data bar. Repeat this process for each data bar.



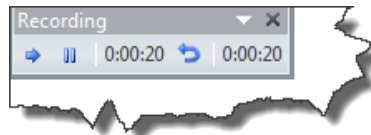
4. **Narrate Your Slide Show** – PowerPoint 2003, 2007 and 2010 allow you to narrate and record your slide show presentation. To narrate your slide show in PowerPoint 2010, make sure that you have

a microphone connected to your computer and from the **Slide Show** tab select **Record Slide Show**, and click the **Start Recording** button.



To narrate your slide show in PowerPoint 2007, from the **Slide Show** tab, select **Record Narration** and click **OK**. In PowerPoint 2003, from the **Slide Show** menu, select **Record Narration** and click **OK**.

Wearing a head set with a boom microphone will help capture your voice more consistently. Deliver your presentation as you normally would, using the mouse or space bar to advance your slides. To stop recording, simply close the **Recording** dialog box displayed in the upper left hand corner during the recording session, or press the **ESC** key.



To stop recording a narration in PowerPoint 2003 and 2007, press the **ESC** key. If necessary, you can pause the recording by clicking the pause button in the **Recording** dialog box. The resulting file can be e-mailed, or uploaded to the Internet where others can view your complete presentation, including your voice, animations, and slide timing.

5. **Convert Your Slide Show into a Video Clip** – A new feature available only in PowerPoint 2010 is the ability to convert your PowerPoint presentation into a Windows Media Video (WMV). The WMV file format is more transportable than a PowerPoint format, and can be easily uploaded to YouTube or streamed to handheld devices. The video will include your animations, narration, and timings. (If your slide show does not include timings, you can set the number of seconds each slide is to be displayed in the video in the **Create a Video** dialog box.) To generate a video file from your presentation, select **Save & Send** from the **File** tab and click **Create a Video**. From the untitled **drop down option arrow**, choose to create either a **large**, **medium**, or **small** video, click the **Create Video** button, enter a file name in the **File name** box, and click **Save**.

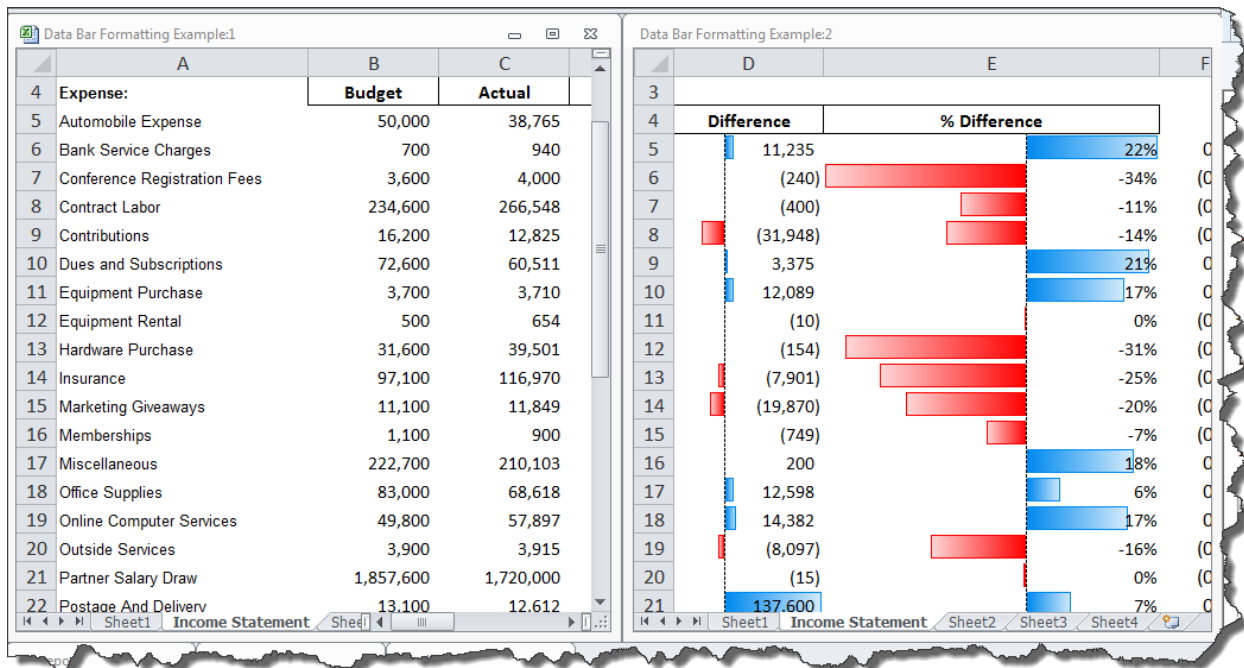
(The large video option (960 X 720) provides the highest quality; the medium video option (640 X 480) is best suited for creating DVDs, uploading to YouTube, or publishing to the Internet; and the small video option (320 X 240) is best suited for streaming to handheld devices.)

## An Excellent Arrangement

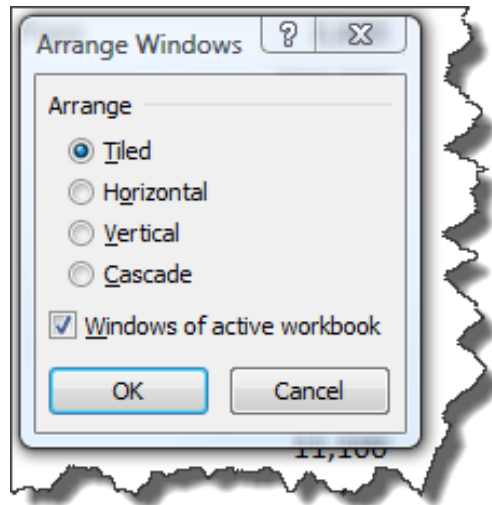
**Q.** Last year my office upgraded to two monitors at each workspace. Having simultaneous full-screen views of two different files is a vast improvement over split-screen windows. Is it possible to display a different tab from the same Excel worksheet on two monitors?

**A.** Start by displaying Excel across both monitors as follows: Click the **Restore Down** button in the upper right corner of the Excel window. Use the mouse to drag the edge of the Excel window across both monitors.

To display two views of the same workbook in Excel 2007 or 2010, select **New Window** from the View menu, then select **Arrange All, Tiled, OK** also from the **View** menu. In Excel 2003, select **New Window** from the **Window** menu, then select **Arrange, Tiled, OK** also from the **Window** menu. You can view multiple worksheets from the same workbook side-by-side on a single monitor. In this situation, each window will scroll independently and best of all, according to reader Rick McNeil, updates entered into one window will automatically update the other windows. An example of multiple windows for the same workbook is shown below.



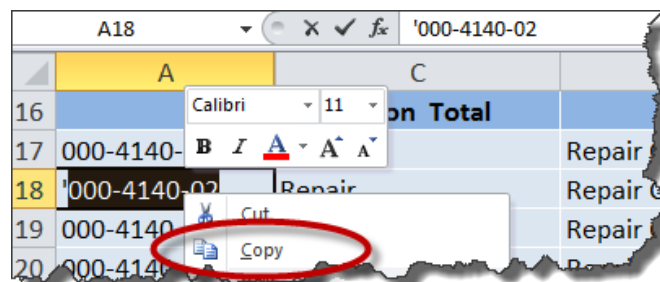
**Hint:** To ignore other workbooks you have open, and arrange the windows for your current workbook only, check the **Windows of active workbook** checkbox in the **Arrange Windows** dialog box in Excel 2010, or the **Arrange All** dialog box in Excel 2007.



## Pasting Away Again...

**Q.** Often in Excel, I need to copy and paste the account number from one cell location to multiple cell locations. However, as soon as I use the Excel menu, the account number data from the source cell is deselected, and I must keep going back to recopy the original cell. Is there a trick to pasting contents to multiple cells without having to copy it repeatedly?

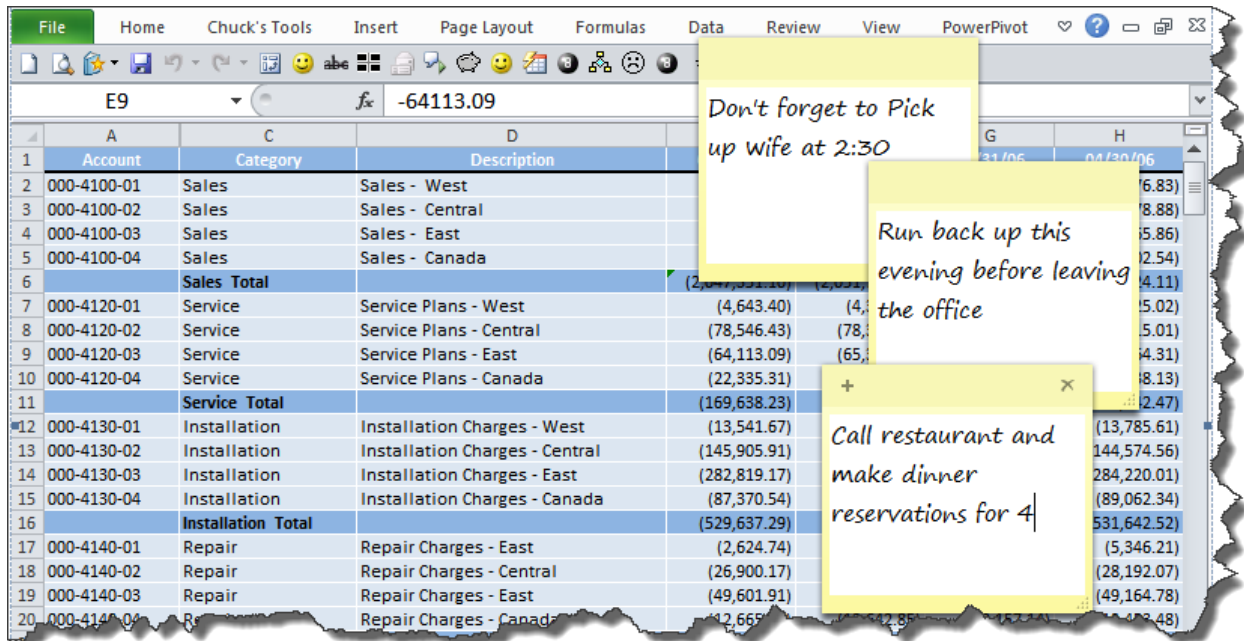
**A.** This solution should help. Before you copy the contents of the source cell, click the **F2** key to enter edit mode. Use your mouse to select the entire contents of the cell, then **Right Mouse Click** and select **Copy** from the popup menu (or press **Ctrl + C**). This action will copy the contents of your source cell to the **Windows Clipboard** where it will remain until you copy something else to clipboard. This will allow you to continue to paste the contents of the original cell multiple times without losing the source data, even if you use the Excel menu.



## A Sticky Situation

**Q.** What's a simple tool for keeping track of short notes and reminders?

**A.** Windows Vista and Windows 7 offer a tool called **Sticky Notes** that is quick and easy to use. To launch Sticky Notes, click the **Start** button and type **StikyNot.exe**, and press **Enter**. This will display a small note like the one shown below. You can type a short message or if you have a mouse pen, you could write the message freehand. To create additional Sticky Notes, click the **plus sign** in the upper left corner of any existing Sticky Note. Use your mouse to drag and drop sticky notes to desired position. An example using Sticky Notes is shown below.



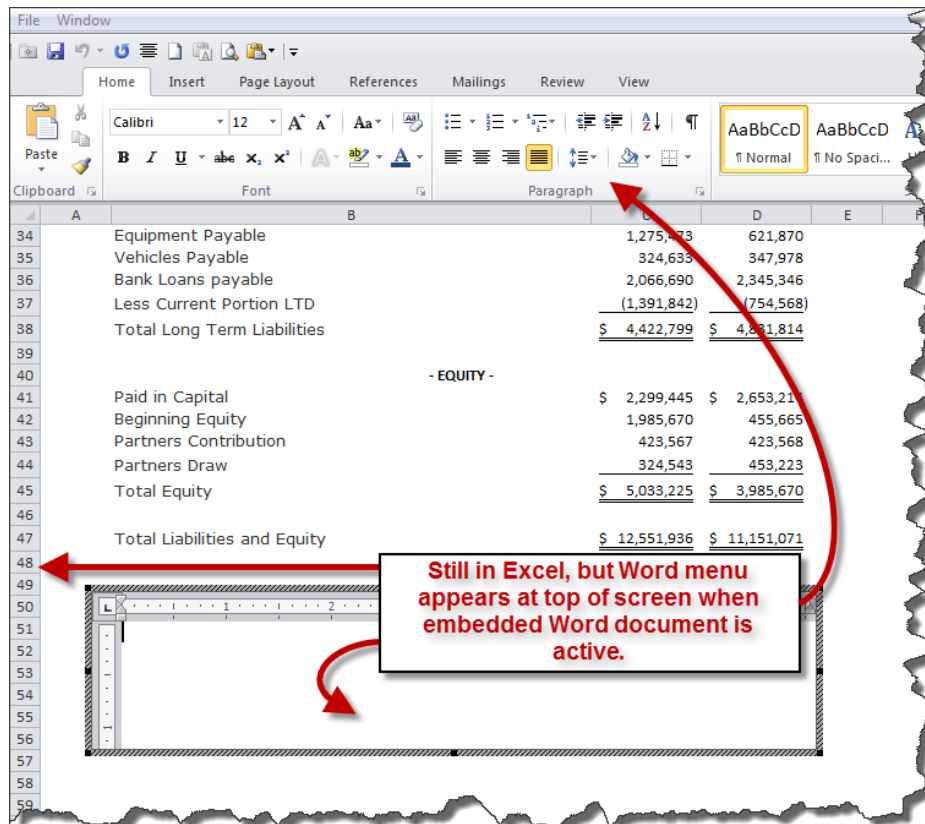
A stronger solution would be to use the **Tasks** feature in Outlook to track your reminders and to-do notes. Look for more on this topic in next month's issue.

## Foot Your Financials in Excel

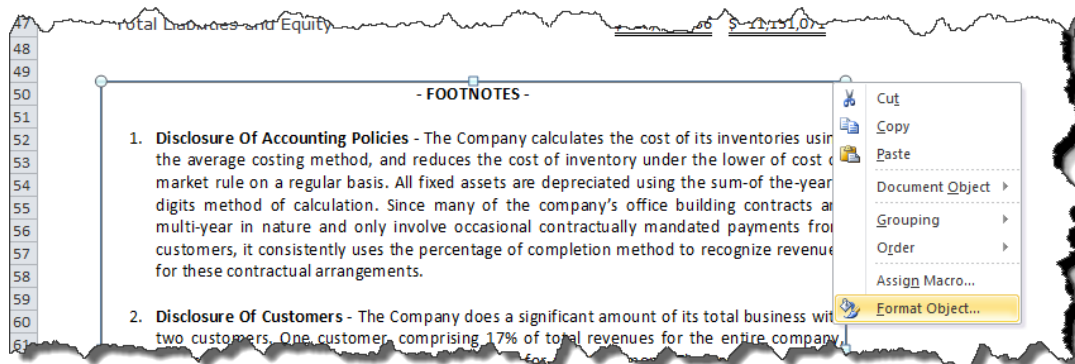
### Attaching Footnotes to Excel-based Financial Statements

**Q.** We produce financial statements from Excel, but typing the footnotes at the bottom of the financial statements is a headache because Excel does not offer word wrap, outlining and other word processing features. We have tried using different solutions such as Excel's Justify command, and pasting from Word, but these solutions fall short, especially when edits are needed. Is there a better approach?

**A.** Embedding a Word document in Excel as an object is a solution that provides Word processing functionality in Excel. To embed a Word document in an Excel 2003, 2007 or 2010 worksheet, select **Object** from the **Insert** tab or menu, then select **Microsoft Word Document** and click **OK**. Use the mouse to reposition and resize the resulting embedded Word Document Object underneath the financial statement (or in the appropriate position) as pictured below.



The embedded Word object allows you to type using the same word processing functionality provided by Word, such as outlining, paragraph justification, indenting, and Word shortcuts (such as Shift+F3 to change case). When you click away from the Word object, the Word menus disappear and the Excel menus return to normal. Double clicking on the Word object reactivates the embedded object allowing you to further edit its' contents using word processing functionality.



To finalize your footnotes, consider adding the following finishing touches:

1. **Font** - For consistency, change the footnote font to match the font used in the financial statements.

- Border** - Click away from the Word box to deactivate the object, and click the Word box once to select it. Right-mouse click on the edge of the Word object to display the popup menu, and select **Format Object** as pictured above. On the **Colors and Lines** tab, click the **Line Color** drop down arrow and select **No Line**, and click **OK**.

Once printed, the resulting footnotes will appear seamlessly at the bottom of the financial reports, as shown below.

36	Bank Loans payable	2,066,690	2,345,346
37	Less Current Portion LTD	(1,391,842)	(754,568)
38	Total Long Term Liabilities	<u>\$ 4,422,799</u>	<u>\$ 4,831,814</u>
39			
40	<b>- EQUITY -</b>		
41	Paid in Capital	\$ 2,299,445	\$ 2,653,214
42	Beginning Equity	1,985,670	455,665
43	Partners Contribution	423,567	423,568
44	Partners Draw	<u>324,543</u>	<u>453,223</u>
45	Total Equity	<u>\$ 5,033,225</u>	<u>\$ 3,985,670</u>
46			
47	Total Liabilities and Equity	<u>\$ 12,551,936</u>	<u>\$ 11,151,071</u>
48			
49	<b>- FOOTNOTES -</b>		
50			
51			
52	1. <b>Disclosure Of Accounting Policies</b> - The Company calculates the cost of its inventories using the		
53	average costing method, and reduces the cost of inventory under the lower of cost or market		
54	rule on a regular basis. All fixed assets are depreciated using the sum-of-the-years-digits		
55	method of calculation. Since many of the company's office building contracts are multi-year in		
56	nature and only involve occasional contractually mandated payments from customers, it		
57	consistently uses the percentage of completion method to recognize revenues for these		
58	contractual arrangements.		
59			
60	2. <b>Disclosure Of Customers</b> - The Company does a significant amount of its total business with		
61	two customers. One customer, comprising 17% of total revenues for the entire company, also		
62	comprises 51% of the revenues of the not-for-profit segment. The second customer, comprising		
63	31% of total revenues for the entire company, also comprises 57% of the revenues of the		
64	Government segment.		
65			
66	3. <b>Disclosure Of Commitments</b> - The Company has entered into a contract to purchase a		
67	minimum of 75,000 cubic yards of concrete per year for the next 7 years at a fixed price of		
68	\$75.00 per cubic yard, with no price escalation allowed for the duration of the contract. The		
69	company's minimum annual payment obligation under this contract is \$6,625,000. The price		
70	paid under this contract is \$15.00 less than the market rate for concrete as of the date of these		
71	statements, and had not significantly changed as of the statement issuance date.		

## An Iconic Solution

### Measures for Controlling the Display Order of Desktop Icons

Q. I have about 40 icons on my desktop (five years of tax preparation software, several CPA productivity tools, the office suite, practice management and just plain computer overhead tools like the Recycle Bin). I have arranged these icons so I can find them easily, but Windows sometimes rearranges them in no apparent order, and I have to start over. I'd like to avoid putting them into folders on the desktop because that just adds another mouse click. Is there a way to lock my icons in place?

A. Desktop icons may automatically rearrange when the video resolution changes during boot-up and you have Auto Arrange turned on. To turn off Auto Arrange, right click on the **Desktop** and in the popup menu:

**Windows XP** - Select **Arrange Icons By**, and if selected, click **Auto Arrange** to deselect it.

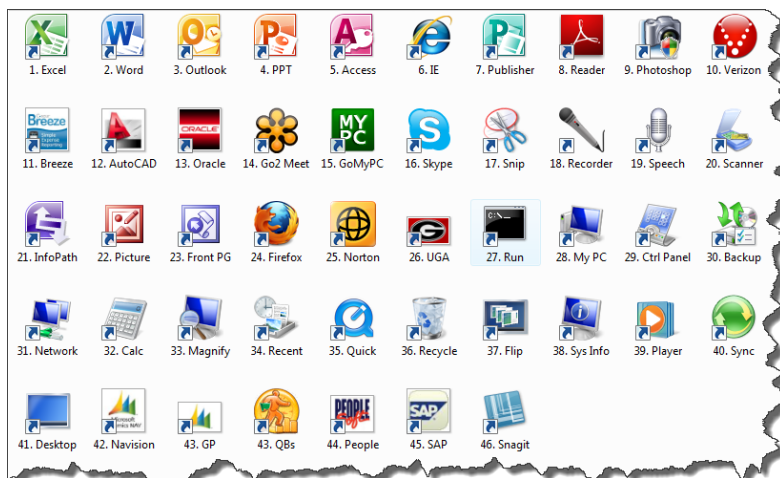
**Windows Vista** – Select **View**, and if selected, click **Auto Arrange** to deselect it.

**Windows 7** - Select **View**, and if selected, click **Auto arrange icons** to deselect it.

**Known Issue** - Even with Auto Arrange turned off, this is a known issue with some Windows XP systems, and reportedly, in some cases, this problem can be corrected as follows:

1. Arrange your desktop icons according to preference.
2. Right click on desktop, select **Arrange Icons By**, and uncheck **Show Desktop Icons**.
3. Right click on desktop, select **Arrange Icons By**, and check **Show Desktop Icons**.
4. Re-boot your computer.

**Numbered Icons** – A better solution may be to rename and number each **ICON** to control the specific order in which icons are auto arranged. As a practical matter, I always rename my desktop icons anyway, in order to abbreviate the name and save space. Examples of my renamed and numbered desktop icons are pictured below.





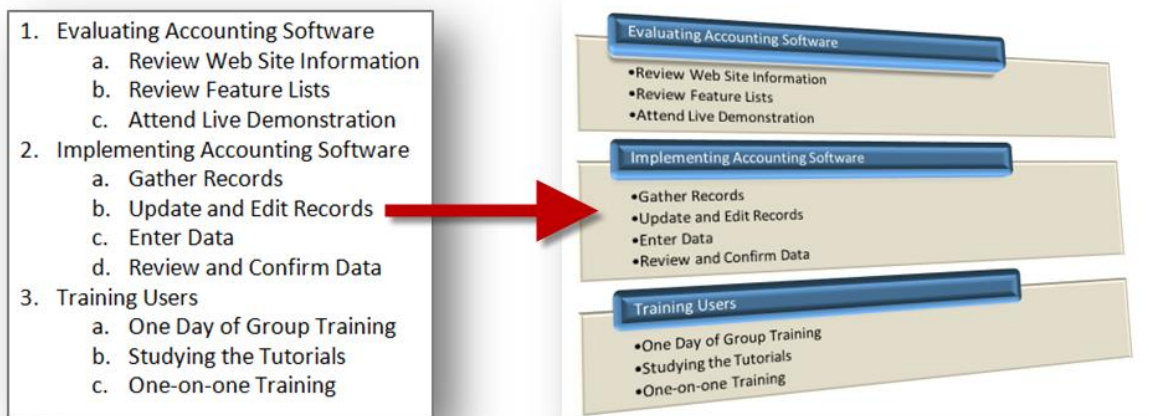
Using this approach, my frequently used icons remain in position, even with Auto Arrange enabled. This tip may be particularly beneficial to Windows 7 users when organizing folder icons because that system no longer allows users to disable Auto Arrange in folders.

## A Smart Solution to Formatting Bullet Lists

*Using Excel's SmartArt to Format Bullet Lists*

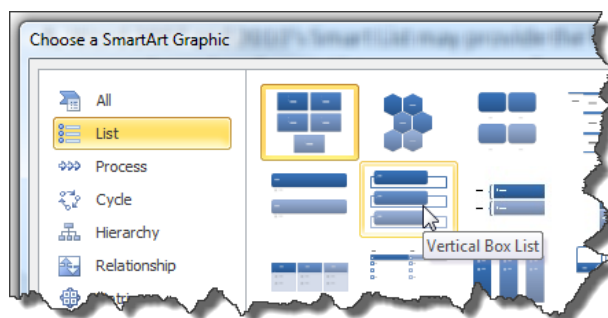
**Q.** I frequently create multi-level numbered lists in Word, and I want these lists to stand out, so I spend a lot of time individually formatting the various levels in my lists, but this is a tedious process. Is there any way to create a list style or easily apply formats to a list?

**A.** Word 2007 and 2010's **SmartArt Vertical Box List** may provide the formatting solution you are looking for. As an example, SmartArt options were used to transform the boring list below on the left to the more vibrant list on the right.

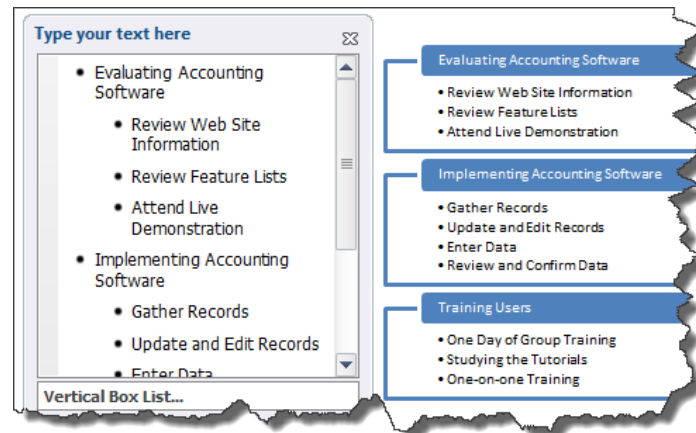


Specific steps for inserting a Smart List and achieving this transformation are described below.

1. In Word 2007 or 2010, highlight and copy your outline list.
2. Select SmartArt from the **Insert** tab to open the **Choose a SmartArt Graphic** dialog box.
3. On the left side of the dialog box, select **Lists**, and then select the **Vertical Box List** as shown below.



4. Click the **Vertical Box List** to select it, and to display the **Type your text here** dialog box. (If the dialog box does not display, right click on the **Vertical Box List** and select **Show Text Pane** from the popup menu.)
5. Click in the **Type your text here** dialog box and press **Ctrl + A** to select the default outline shown, and press **Ctrl + V** to paste your new outline. Your results should appear as follows:



6. Add finishing touches by clicking on the **Vertical Box List** to select it, and to display the **SmartArt Tools** menu at the top of the screen. Under the **SmartArt Tools, Design** tab, select **Change Colors** and select a desirable color scheme, such as **Colorful Range – Accent Colors 2 to 3**.
7. Again from the **SmartArt Tools, Design** tab, select the **SmartArt Styles** dropdown and select **Sunset Scene**.

**Note:** SmartArt graphics are limited to a single page and therefore larger lists that span multiple pages will need to be broken up into separate SmartArt images, which may make this formatting approach less desirable.

## Internet Explorer 8 Shortcuts

1. **CTRL + Enter** – When typing a web address into your browser’s address box, pressing Ctrl + Enter will automatically insert the www. and .com. For example, type “**HP**” into the address bar and press **Ctrl + Enter** to quickly navigate to the www.HP.com web site.
2. **Shift + Click on a Hyperlink** – This keystroke combination makes the hyperlink launch in a new window.
3. **CTRL + Scroll Wheel** - Rolling the wheel forward and backward while holding down the **CTRL** key zooms in and out of the web page.

## Windows Shortcuts

1. **Windows key + M** - This keystroke combination will instantly minimize all open windows.

2. **Windows key + L** – This keystroke combination will instantly lock your computer. You will need to log back in using your Windows password to continue. (This works in Windows XP or higher.)
3. **ALT + Open Folder** - Holding the **Alt** key when opening a folder will open the folder's properties dialog box (This is slightly quicker than **Right-clicking** on a folder and selecting **Properties** from the popup menu).
4. **Windows key & Pause/Break** - This keystroke combination opens the system properties dialog box. (This is quicker than navigating through Control Panel).
5. **Shift + Delete** - Holding the **Shift** key while pressing **Delete** on selected files or folders will delete them permanently without placing a copy in the Recycle Bin.

### Add Value, Instantly

#### *Opening two Workbooks in one Instance of Excel across Multiple Monitors*

**Q.** When I open Excel on my two separate monitors, Excel doesn't allow me to use **Paste Special, Value, Add**; it only works when I have the two workbooks opened on the same monitor. What's going on and how do I fix this?

**A.** The issue is not that you are using two computer monitors, the issue is that you have two instances of Excel open at the same time, and Excel's paste function behaves differently when pasting between two instances of Excel compared to pasting between two workbooks opened in the same instance of Excel.

Last month's topic titled "An Excellent Arrangement" provided instructions for displaying two views of a single Excel workbook side-by-side on a single monitor. Building on this foundation, presented below are similar steps for displaying two different Excel workbooks side-by-side in a single instance of Excel stretched across two monitors. This approach will enable you to both view and use **Paste Special, Value, Add** between two different workbooks displayed on separate monitors.

1. **Open** only one instance of Excel.
2. **Restore down** the Excel window by double-clicking the **Title Bar** located at the top of the window.
3. **Stretch** the window across both monitors by hovering your mouse pointer over either the left or right edge of the window until your pointer becomes a double arrow, then click and drag the window across both monitors.
4. **Open** two Excel workbooks.
5. In Excel 2007 and 2010, select **Arrange All** from the **View** tab to display the two workbooks side-by-side, each appearing in a separate monitor. In Excel 2003, select **Arrange** from the **Window** menu, select **Tiled**, and click **OK**.

You can now use **Paste Special, Value, Add** between the two Excel workbooks.

## A Colorful Preview

*Make Print Preview Display Charts and Tables in Color*

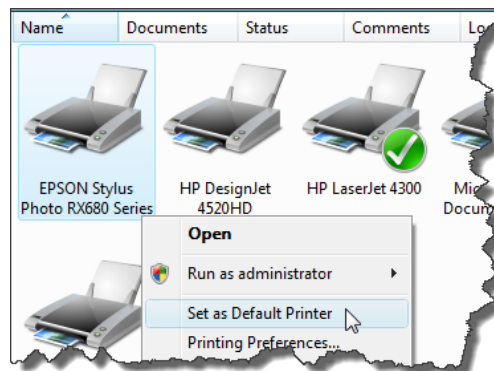
**Q.** I developed a presentation consisting of numerous Excel charts and data tables on my desktop computer, and I plan to use Print Preview to deliver the presentation. In practice, on my desktop computer this approach works well; but when I transfer the presentation to my laptop, the presentation previews in black and white, not color. I can't find a setting anywhere to make my laptop preview in color. Can you help?

**A.** I applaud your ingenuity; using Print Preview can sometimes be a quick and easy method for organizing and displaying selected portions of your Excel worksheet to an audience. Excel's Print Preview uses the system's default printer as a basis for rendering the preview. If you change your computer's default printer to a color printer, the previewed print job will display in color.

To change your default printer setting, launch **Control Panel** from the **Start** button, and:

1. In Windows 7, select **Hardware and Sound, Devices and Printers**,
2. In Windows Vista, select **Hardware and Sound, Printers**,
3. In Windows XP, select **Printers and Faxes**,

Right click on a color printer, and select **Set as default printer** from the popup menu as pictured below.



You can set up and use a color printer for Print Preview purposes, even if you do not have a color printer attached to your laptop computer. To add a color printer:

1. Launch **Control Panel** and:
  - a. In Windows 7 and Vista, select **Hardware and Sound, Add a printer**,
  - b. In Windows XP, select **Printers and Faxes**, and under the **Printer Tasks** menu, select **Add a printer**,
2. In the **Add Printer** dialog box, select **Add a local printer**,
3. Choose any port from the **Use an existing port** drop down menu and click **Next**,

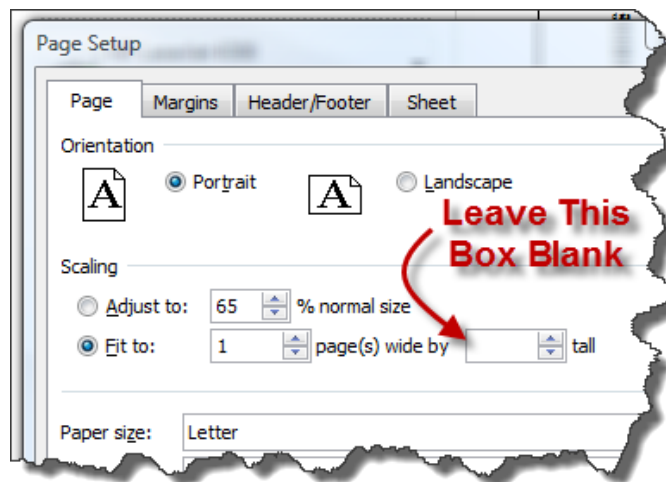
4. Select any manufacturer and color printer model and click **Next**,
5. Provide an appropriate name in the **Printer Name** box, click **Next**,
6. If asked to share the printer, select **No**,
7. Click **Finish**.

## One Tall Solution

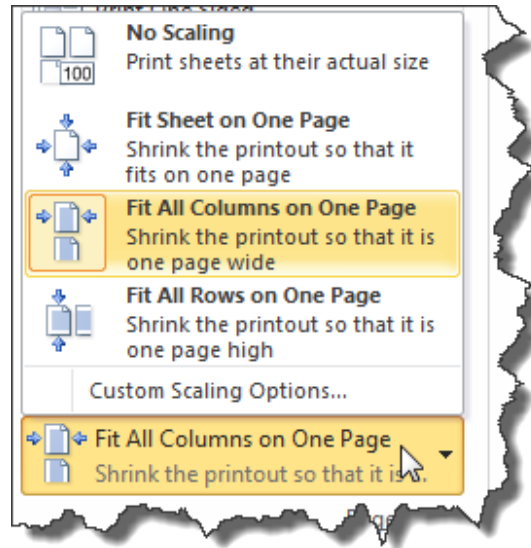
*Leave the Tall Print Setting Blank when Scaling to Width*

**Q.** When printing large worksheets in Excel 2003, is there an easy trick to figuring out how many pages tall the print job needs to be to ensure that my worksheet prints out as wide as possible on the page, but no wider? I usually set the page width to 1 page, then use the trial and error method to figure out how many pages tall the print job needs to be.

**A.** Yes, there is an easy solution. Simply leave the **tall** box blank in **Page Setup**, and Excel will automatically calculate the number of pages tall the report needs to be to print your worksheet based on the number of pages wide you specify.



**Note:** Excel 2007 and 2010 both provide the menu option **Fit All Columns on One Page** that accomplishes the same result.



## A Colorful Preview

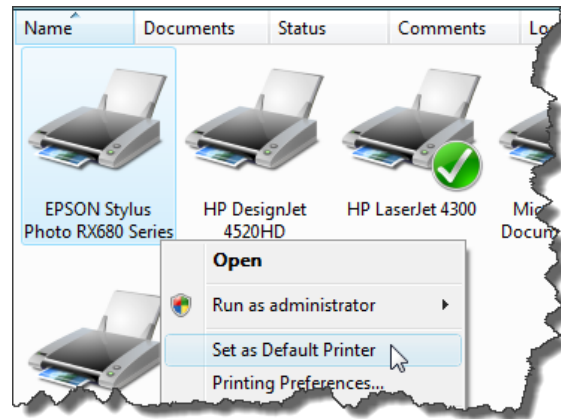
**Q.** I developed a presentation consisting of numerous Excel charts and data tables on my desktop computer, and I plan to use Print Preview to deliver the presentation. In practice, on my desktop computer this approach works well; but when I transfer the presentation to my laptop, the presentation previews in black and white, not color. I can't find a setting anywhere to make my laptop preview in color. Can you help?

**A.** I applaud your ingenuity; using Print Preview can sometimes be a quick and easy method for organizing and displaying selected portions of your Excel worksheet to an audience. Excel's Print Preview uses the system's default printer as a basis for rendering the preview. If you change your computer's default printer to a color printer, the previewed print job will display in color.

To change your default printer setting, launch **Control Panel** from the **Start** button, and:

4. In Windows 7, select **Hardware and Sound, Devices and Printers**,
5. In Windows Vista, select **Hardware and Sound, Printers**,
6. In Windows XP, select **Printers and Faxes**,

Right click on a color printer, and select **Set as default printer** from the popup menu as pictured below.



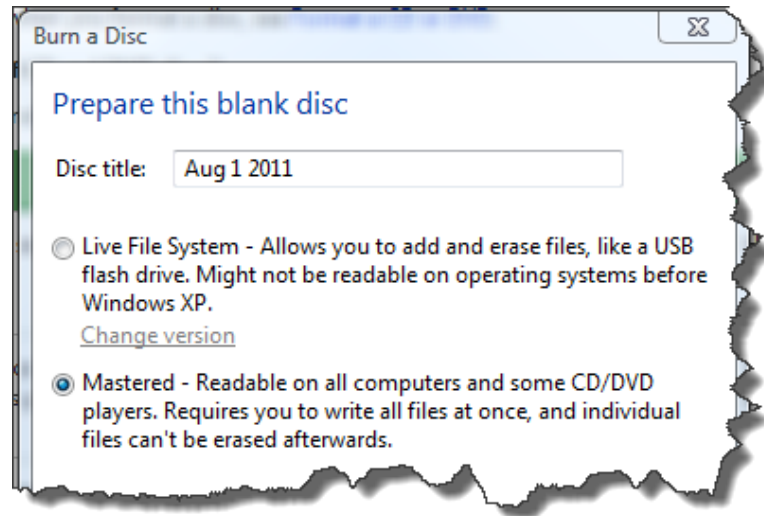
You can set up and use a color printer for Print Preview purposes, even if you do not have a color printer attached to your computer. To add a color printer:

8. Launch **Control Panel** and:
  - a. In Windows 7 and Vista, select **Hardware and Sound, Add a printer**,
  - b. In Windows XP, select **Printers and Faxes**, and under the **Printer Tasks** menu, select **Add a printer**,
9. In the **Add Printer** dialog box, select **Add a local printer**,
10. Choose any port from the **Use an existing port** drop down menu and click **Next**,
11. Select any manufacturer and color printer model and click **Next**,
12. Provide an appropriate name in the **Printer Name** box, click **Next**,
13. If asked to share the printer, select **No**,
14. Click **Finish**.

## Mastering Your CDs

Q. My client created a backup of their data files using a CD disc, but when we tested the disc on another computer, we were unable to read the disc. Is there a secret trick to creating CDs that can be read by other computers?

A. Burning CDs in Windows can be a confusing proposition. Windows provides the ability to burn discs using one of two available formats: Live File System and Mastered. Assuming your computer has a writable CD drive, to burn a disc using either format in Windows 7, Vista or XP, insert a writable disc (CD-R, CD-RW, DVD or Blue-ray) into your computer's disc drive, and close the drive. The AutoPlay dialog box will appear offering several options, depending upon your computer and the software installed. (If the AutoPlay dialog box does not open automatically, follow the instructions for launching your disc burning program, these instructions will vary depending upon the computer and software you have). Select **Burn files to disc using Windows** to display the **Burn a Disc** dialog box. Click the **Show formatting options** dropdown arrow and check either the **Live File System** the **Mastered** radio buttons as shown.



Click **Next** to display an empty disc folder, then drag the files you want to write to the CD to the empty disc folder and click the **Burn to disc** button located at the top of the folder. In the dialog box that follows, click **Burn files to data disc**.

Each format has advantages and disadvantages as follows:

**Mastered CDs** - The Mastered format is the superior format for compatibility with other computers because it creates discs with special formatting and extra coding that is compatible with most Windows based computers and many other operating systems. The disadvantage is that to create a Mastered CD, you must collect the files you want copied and burn them in bulk, instead of adding files to the CD one (or a few) at a time.

**Live File System** – The Live File System format allows you to create a reusable CD that behaves like a USB thumb drive, allowing you to add files from the CD as needed, and without having to burn the entire CD. The disadvantage of the Live File System format is that it is less compatible than the Mastered format, and compatibility varies based on the version of Live File System. A summary of the four versions of Live File System and their compatibility follows:

1. **Live File System version 1.02** – Compatible with Windows 98 and many Apple computers.
2. **Live File System version 1.5** – Compatible with Windows 2000, Windows XP, and Windows Server 2003. (It is usually with Windows 98 and Apple computers depending upon various factors.)
3. **Live File System version 2.01** – Compatible with Windows XP and Windows Server. (It is usually compatible with Windows 98, Windows 2000, and Apple computers, depending upon various factors.)
4. **Live File System version 2.5** – Compatible with Windows 7 and Vista. (It is usually compatible with earlier versions of Windows, depending upon various factors.)



Therefore, Mastered CDs offer better compatibility while Live File System CDs offer better file convenience for adding and deleting files. Using the Mastered format to create backups will ensure greater compatibility for restoring your backup to another computer.

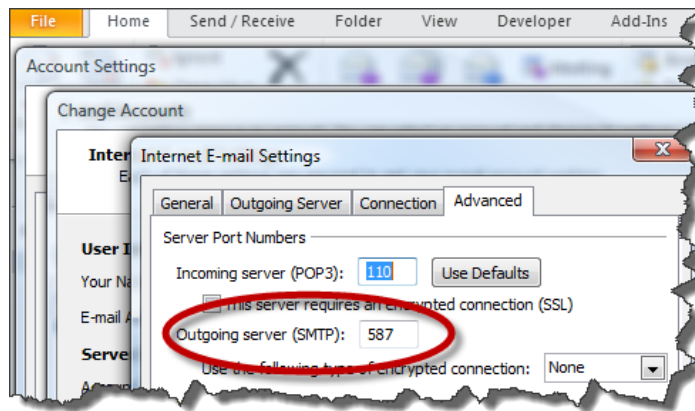
## Your Finest Port

**Q.** I can receive e-mail through Outlook, but I can no longer send e-mail through Outlook. My e-mail used to work just fine and I have not changed the password or any mail settings. What's going on and how do I fix this problem?

**A.** It sounds like your internet service provider (or a relay service provider) has tagged you as a spammer and is therefore blocking your outgoing e-mail. This is a common problem, particularly for those who send messages using e-mail merge (because groups of merged e-mail messages appear similar to spam activity). You may also have been tagged as a spammer if your computer is infected with a virus that is secretly sending spam from your computer when idle. (This may be possible even if you are running anti-virus software.)

Although this problem sounds bad, you can usually solve it by changing your outgoing port from 25 to 587, as follows:

**Outlook 2010** – From the **File** tab, select **Info, Account Settings, Account Settings** (again) to open the **Account Settings** dialog box. Under the **E-mail** tab, select the E-mail account that is not sending properly and click **Change** to open the **Internet E-mail Settings** dialog box. Click the **More Settings** button, and on the **Advanced** tab change the value in the **Outgoing server (SMTP)** box to **587** as shown, and click **OK, Next, Finish**. Click the **Close** button to close the **Account Settings** dialog box.



**Outlook 2007** – From the **File** menu, select **Data File Management** to open the **Account Settings** dialog box. Under the **E-mail** tab, select the E-mail account that is not sending properly and click **Change** to open the **Internet E-mail Settings** dialog box. Click the **More Settings** button, and on the **Advanced** tab change the value in the **Outgoing server (SMTP)** box to **587**, and click **OK, Next, Finish**. Click the **Close** button to close the **Account Settings** dialog box.

**Outlook 2003** – From the **Tools** menu, select **E-mail Accounts**, and in the resulting dialog box select **View or change existing e-mail accounts** and click **Next**. Click the **More Settings** button, and on the **Advanced** tab change the value in the **Outgoing server (SMTP)** box to **587**, and click **OK**.

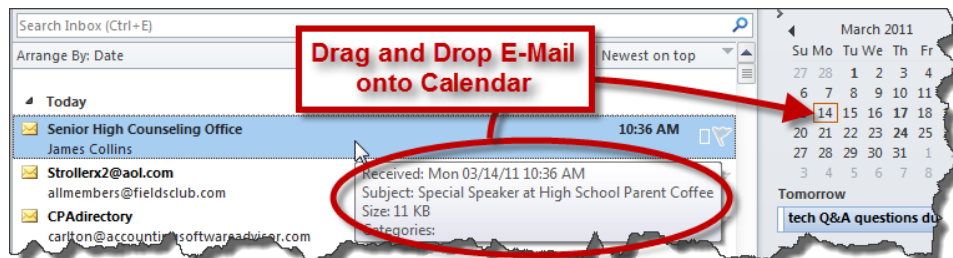
This issue relates to the Internet Engineering Task Force (IETF) memorandum RFC 4409 Message Submission for Mail, a set of standards formalized in April 2006 to help fight spam. Among other measures, this memorandum mandates that for all e-mail messages sent via port 587, any alias names must be resolved as e-mail is relayed from one server to the next, making it easier to trace the true source of e-mail messages. Messages sent via port 25 are not required to abide by such standards, therefore many internet service providers now block messages sent via port 25 for any sender suspected of spam. Upon changing your port setting, you should be able to once again send e-mail.

## Outlook 2010 and 2007 Shortcuts

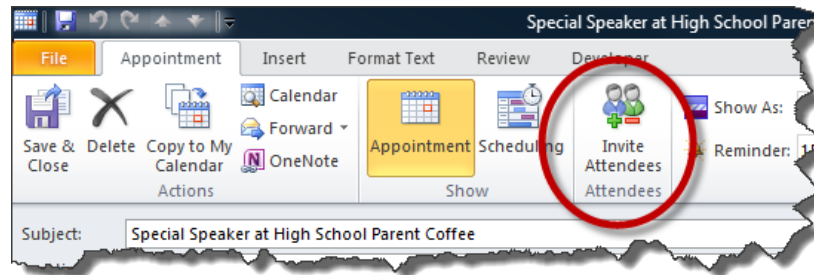
1. **Convert an E-Mail to a Task** – Selecting an e-mail message and pressing the **Insert** key converts the e-mail to a task and copies the task to your **Tasks** list. In addition, the Outlook message is flagged in red to let you know that it is linked to a task.



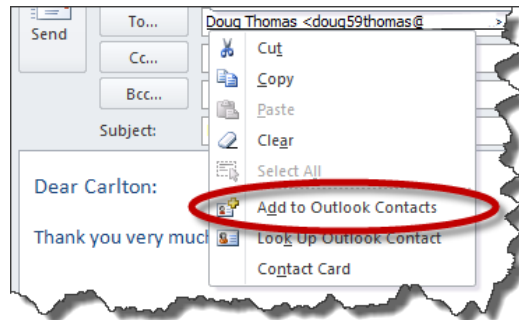
2. **Convert an E-Mail to an Calendar Appointment** – First, make sure that the To-Do Bar is visible by selecting **To-Do Bar, Normal** from the **View** tab. Select an e-mail, then drag and drop it on a specific date on your calendar (in your To-Do Bar) to create an appointment on your calendar. Add the location, start time, and end time (if necessary), and click the **Save and Close** from the **Appointment** tab.



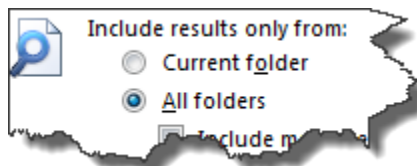
3. **Convert an E-Mail to a Meeting Request** – Follow the same procedure described above for creating a calendar appointment, except before you Save and close, select **Invite Attendees** from the **Appointment** tab to create a meeting request. Select recipients to invite to the meeting using the **To** button, then click the **Send** button.



- 4. **Convert an E-Mail Sender to a Contact** – In an open e-mail, right click on the name of the sender to display the popup menu, and select **Add to Outlook Contacts**, and click **Save and Close** from the **Contact** tab.



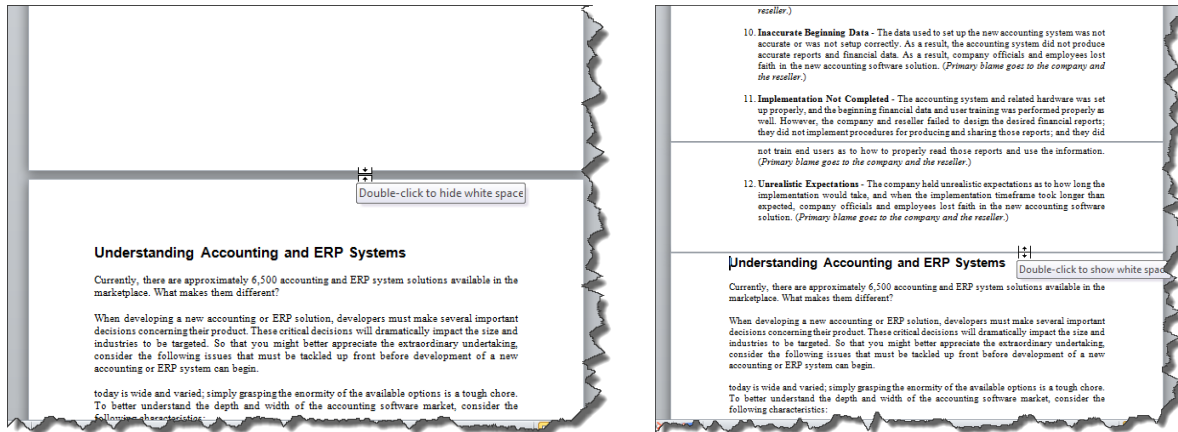
- 5. **To Search All Mail Folders** – In Outlook 2010, from the **Search** tab select **Search Tools, Search Options**, and click the radio button labeled **All folders**. In Outlook 2007, next to the **Search** box, click the down arrow and select **Search All Mail Items**.



## HIDING BETWEEN THE PAGES

**Q.** Is it possible to temporarily hide or suppress headers, footers or page borders when reading a Word document?

**A.** Double clicking on the separation between pages will suppress headers, footers, borders, space between the pages, and any extra white space at the bottom of a page, thus allowing you to view the maximum amount of text on your screen. For example, the two screens below show the same document, except the view on the right has been collapsed, allowing you to view three pages of text instead of just one.

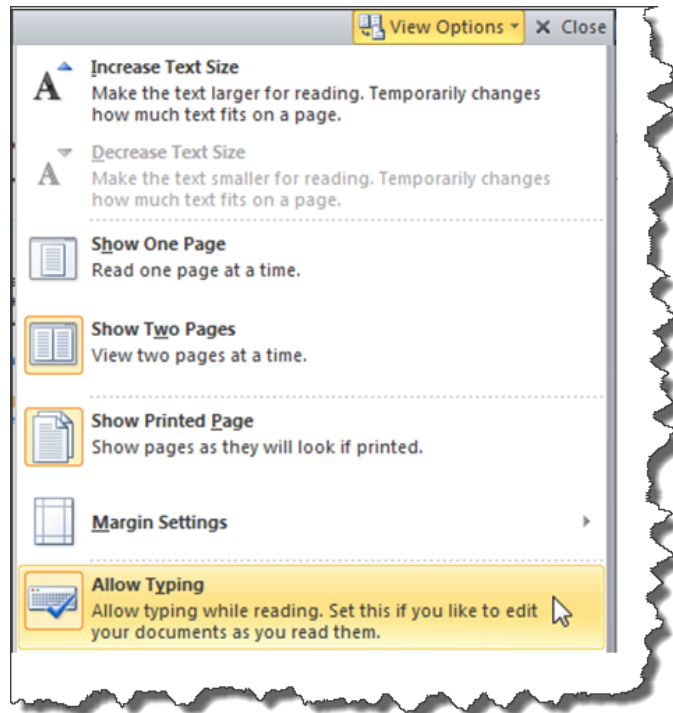


To restore the headers, footers and space between the pages, double-click the solid line separating the pages. Keep reading below for another potential solution.

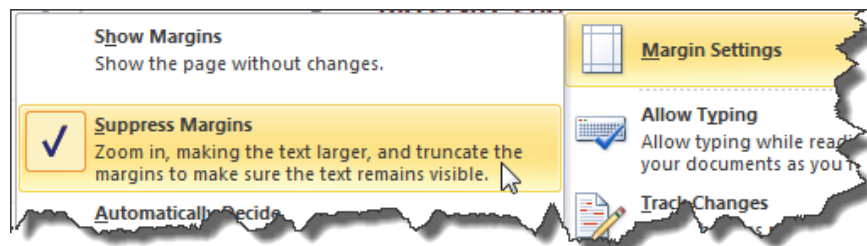
## YOUR TYPE IS NOT ALLOWED

**Q.** I like to review Word documents in Full Screen Reading view, but when I catch typos or want to make changes, I must switch back to Print Layout view to make those changes. Is there a different option that allows me to read more text on the screen, yet edit the text at the same time?

**A.** Word's Full Screen Reading view quickly suppresses the menus and positions two sequential pages side by side, enabling you to view more text. By default, this view does not allow editing, but you can enable editing as follows. In Full Screen Reading view, click the **View Options** dropdown button in the top right corner, and select **Allow Typing**.



This action will allow you to make changes in Full Screen Reading view. Also shown in the screen image above, additional options allow you to temporarily increase or decrease the text size for better readability, without actually changing the text size in the document. Further, related to the previous question, the Margin Settings option provides the ability to **Suppress Margins**, as shown below.



(If the Suppress Margins option is greyed out, select the option **Show Printed Page** to make the Suppress Margins option available.)

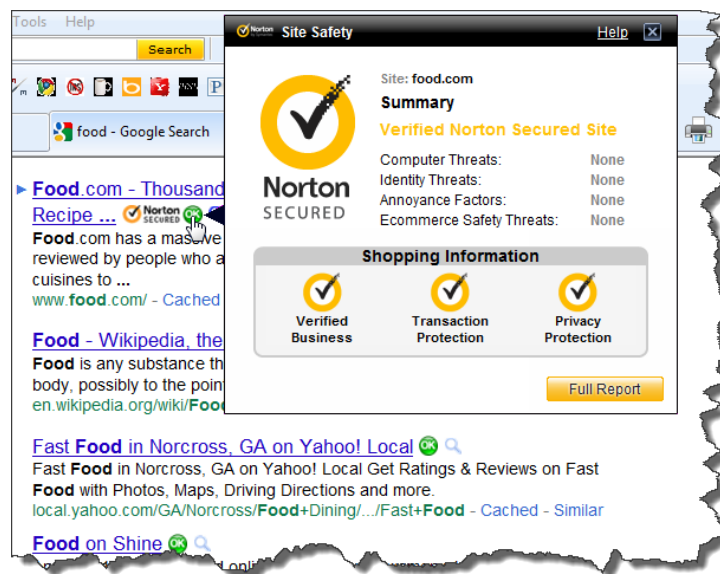
## DRIVE-BY VIRUS

**Q.** While one of my employees was surfing the internet, a browser un-expectedly popped up warning that his computer was infected with a virus. A few seconds later, the browser started scanning the computer's hard drive and downloading files. Each time he closed the browser; another browser popped open and continued the process. Finally, he pulled the plug, but by then the damage was done and the computer would not reboot. Ultimately, we hired a technician to reformat and reload the programs and data from scratch. The employee is certain

that the computer was running an anti-virus program at the time, but we could not confirm this, or determine which one. How do I prevent this problem from recurring?

A. Even if you are running virus protection software, it is possible to encounter a virus like the one you described. The virus can be triggered by visiting an infected web page, clicking an infected hyperlink, or mousing over an infected web page object. While these viruses often warn of an infected computer and offer to scan your hard drive to solve the problem, in reality, the viruses usually use the opportunity to install more malicious code on your computer.

Because new viruses continue to emerge, there is no sure way to absolutely protect your computer, but you can mitigate the problem. To protect your computer, always run up-to-date anti-virus software, avoid browsing suspicious or unknown web sites, and make frequent backups of your computer systems. When I search the internet, the virus protection solution I use inserts an emblem at the end of each search result link verifying that the web site is virus free, and I often rely on this information before clicking the link. Hovering over the emblem provides a summary of this verification, and a link to a full report, as shown.



In the event that I do click on a dubious web page link, my anti-virus software displays the following warning page, giving me one more chance to avoid the suspicious web page.



**When Viruses Attack** - If you do encounter a virus that continues to popup malicious browsers, you may be able to thwart the problem if you react quickly by pressing **ALT + F4 repeatedly** to close the current browser and subsequent browsers before they have a chance to fully popup. If you encounter a virus that freezes your computer, and the mouse and keyboard stop responding, holding down the computer's power button for 10 seconds will clear the computer's memory cache and force a reboot.

**Warnings** – These two actions may cause you to lose unsaved work. However, this may be a better option than allowing a virus to fully infect your computer. Also, be aware that holding down the power button down for 10 seconds will reboot your computer and offer you an option to restore your computer to its original factory condition. If you choose this option, you will lose your applications and data.

## DESPERATELY GEEKING SUSAN

**Q.** It's time for me to get a new computer, but I am not sure whether I should purchase a desktop, laptop, netbook, or perhaps even an tablet. Which solution do you think is best? – Susan

**A.** Susan, you have asked a loaded question, which reminds me of the old adage "*Ask ten consultants, get eleven answers.*" There is no correct answer because it depends on many factors such as the type of work you do, the programs you run, the amount of travel, and personal preference. I think the best I can do is tell you what I use (and recommend) and hope this information is useful. I use four different types of computers, and each is valuable to me in its own way, as follows:

1. **Desktop Computer** – I prefer a high-powered desktop computer with multiple monitors (mine has four) for getting most of my important work done. My workstation is well designed and highly functional, with a comfortable chair so I can be highly productive all day.
2. **Laptop Computer** – I carry a laptop computer with me when I travel to stay connected to the office, get work done in a pinch, and to deliver technology presentations. Laptop computers are essential to my work. However, the truth is that I am not a big fan of laptop computers because they have smaller screens, smaller keyboards and I find them uncomfortable to use for extended periods. I usually either place the laptop in my lap which forces me to crane my neck down, or I place the laptop on a desk that is too high, which is uncomfortable for my arms. Neither alternative is conducive to working 8 hours straight.
3. **Tablet** – Desktop computers are most useful for crunching data such as heavy duty spreadsheet preparation, writing lengthy documents, preparing tax returns, managing an accounting system, etc. However, when it comes to accessing, viewing or reading information, a tablet device such as an iPad2 is most useful. My iPad2 is lightweight, turns on instantly, stores electronic versions of the books and magazines I am reading, organizes pictures and video clips, provides access to my e-mail, delivers the latest news stories, and connects to the internet.

4. **Smart Phone** – A smart phone is essentially both a cellular phone and a small hand held computer. In addition to keeping me connected via mobile phone, my smart phone contains dozens of applications such a turn-by-turn GPS directions, maps, weather updates, and travel expense management tools. I can also use my smartphone to take pictures, check and respond to e-mail, and access the internet.

Ignoring software, my cost for these four devices is as follows:

- Desktop (HP Pavilion with four monitors and web cam) - \$1,400
- Laptop (HP Pavilion) - \$599 (refurbished price)
- Tablet – (Apple iPad2) - \$499
- SmartPhone – (HTC Droid Incredible) - Free with \$70 per month 2-year contract.

Susan, while the functionality of these four types of devices overlap somewhat, I find that each device makes me more productive in its own way. If you do not travel or visit client offices, perhaps you could forgo the laptop computer; however, based on my experience, I would recommend all four of these devices to any tech-savvy CPA.

## THE AFTERMATH OF MANY CONDITIONS

**Q.** I use COUNTIF and SUMIF to summarize detailed transactions based on criteria for one column, but I need to count and sum transaction data based on criteria for multiple columns. Is there an easy way to do this?

**A.** Beginning with Excel 2007, Microsoft added the new functions SUMIFS and COUNTIFS, which are the plural equivalents to SUMIF and COUNTIF. These new functions each allow you to Sum or Count based on up to 127 criteria. The proper syntax for using these functions follows:

**SUMIFS(sum\_range, criteria\_range1, criteria1, criteria\_range2, criteria2, ...)**  
**COUNTIFS(count\_range, criteria\_range1, criteria1, criteria\_range2, criteria2, ...)**

For example, the worksheet below lists 100 rows of sales transactions, beginning at row 12. The highlighted formula in cell E6 calculates the total sales for all of Sales Rep Claire's transactions that resulted in a profit margin of less than 15%.



Summary of Sales by Sales Rep and Profit Margin						
		Profit Margin				
		< 15%	< 25%	< 35%		
Claire	=SUMIFS(\$E\$13:\$E\$112,\$D\$13:\$D\$112,\$D6,\$H\$13:\$H\$112,E\$5)					
Phillip	128,156	434,208	173,708			
Dan	351,968	275,258	58,190			
Fred	189,158	353,674	436,710			

Location	Sales Rep	Sales Amt	Cost	Profit	Profit %
Southwest	Claire	45,322	27,344	17,978	39.7%
Northeast	Phillip	60,615	30,732	29,883	49.3%
Canada	Fred	61,508	45,208	16,300	26.5%
Canada	Fred	28,022	16,561	11,461	40.9%
Southwest	Claire	55,449	53,786	1,663	3.0%
Northeast	Phillip	64,078	55,363	8,715	13.6%
Southeast	Dan	52,983	50,334	2,649	5.0%
Canada	Fred	32,195	27,752	4,443	13.8%

**Note:** I could have inserted the criteria (“Claire” and “< 15%”) directly into the formula. Instead, I listed these criteria (along with other criteria) in a table format, and referenced the cells containing the criteria in the SUMIFS formula. This approach allows me to then copy the formula in cell E6 to the range E6...H9 (with slight edits to the formulas in columns F and G) to produce a summary table of values using the SUMIFS function.

**Advanced Tip:** You can use the question mark (?) and asterisk (\*) as wildcard characters in your criteria, whereas a question mark matches any single character, and an asterisk matches any sequence of characters. For example, to sum sales for those transactions resulting in less than 15% profit, which also occurred in either the Northeast or Southeast, I used the criteria “\*east”, as shown.

		Profit Margin				
		< 15%				
*east	=SUMIFS(\$E\$9:\$E\$108,\$C\$9:\$C\$108,\$D6,\$H\$9:\$H\$108,E\$5)					

Location	Sales Rep	Sales Amt	Cost	Profit	Profit %
Southwest	Claire	45,322	27,344	17,978	39.7%
Northeast	Phillip	60,615	30,732	29,883	49.3%
Canada	Fred	61,508	45,208	16,300	26.5%
Canada	Fred	28,022	16,561	11,461	40.9%

## INTERNET EXPLORER 8 SHORTCUTS

1. **CTRL + Enter** – When typing a web address into your browser’s address box, pressing Ctrl + Enter will automatically insert the “www.” and “.com”. For example, type “**HP**” into the address bar and press **Ctrl + Enter** to quickly navigate to the www.HP.com web site.
2. **Ctrl + T** - Opens a new (blank) tab in the foreground.
3. **Ctrl + Click on a Hyperlink** – This keystroke combination makes the hyperlink launch in a new tab in the background.
4. **Ctrl + Shift + Click on a Hyperlink** – This keystroke combination makes the hyperlink launch in a new tab in the foreground.
5. **Ctrl+n** (where n is a number between 1 and 8) - Switch to a specific tab number.
6. **Ctrl + Q** - Toggle Quick Tabs (thumbnail view) on or off.
7. **CTRL + Scroll Wheel** - Rolling the wheel forward and backward while holding down the **CTRL** key zooms in and out of the web page.
8. **Ctrl + Plus Sign** – Increase zoom (+ 10%).
9. **Ctrl + Minus Sign** – Decrease zoom (- 10%).
10. **Ctrl + 0** – Zoom to 10%.



## Bio for J. Carlton Collins, CPA

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J. Carlton Collins, CPA is a Certified Public Accountant with experience in technology, tax, auditing, accounting systems, financial reporting, and bond financing. He is an author, lecturer, and technology & accounting systems consultant. He has published books, articles, and web pages and is the author of the monthly technology Q&A column for the **Journal of Accountancy**. As a public speaker, Mr. Collins has delivered more than 2,000 lectures in 44 states and 5 countries addressing more than 500,000 CPAs and business professionals. As a consultant, Mr. Collins has assisted 275+ large and small companies with the selection and implementation of accounting systems. Mr. Collins has a Bachelor's degree in Accounting from the University of Georgia, is a 25+ year member of the American Institute of CPAs and the Georgia Society of CPAs.

### Summary of Selected Positions, Awards & Accomplishments:

1. Honored as one of the CPA Industries Top 25 Thought Leaders by **CPA Technology Advisor Magazine**
2. Author of the monthly Technology Q&A column for the Journal of Accountancy.
3. Recipient of the AICPA's Lifetime Technical Contribution to the CPA Profession Award.
4. Chairman of the Southeast Accounting Show - the South's largest CPA event.
5. Recipient of the Tom Radcliff Outstanding Discussion Leader Award.
6. Named "Top Ten CPA Technologists" by Accounting Technologies Magazine (multiple years).
7. Named "Top 100 Most Influential CPAs" by Accounting Technologies Magazine (multiple years).
8. Has personally delivered over 2,000 technology lectures around the world.
9. Recipient of the Outstanding Discussion Leader Award from the Georgia Society of CPAs.
10. Lead author for PPC's Guide to Installing Microcomputer Accounting Systems.
11. Has installed accounting systems for more than 200 companies.
12. Chairperson of the AICPA Technology Conference.
13. Recipient of the ACCPAC Partner of the Year Award.
14. Determined by SAP to be one of the country's "Top Ten Most Influential ERP Systems Consultants".
15. Has delivered keynote and session lectures at dozens of accounting software conferences.
16. Sworn in as a Certified Public Accountant on September 18, 1985.
17. Member of the American Institute of CPAs since 1985.
18. Member of the Georgia Society of CPAs since 1982.

As an auditor, Mr. Collins has audited businesses in the areas of health care, construction, distribution, automobile dealerships, insurance, manufacturing, and general business. Mr. Collins' tax experience includes corporate, individual, partnership, fiduciary, and estate tax planning work. In the area of finance, Mr. Collins has prepared (or assisted in preparing) feasibility studies and financial forecasts for nearly 300 projects seeking more than \$3 billion in startup capital. Mr. Collins is familiar with bond issues, Medicare and Medicaid reimbursement, and conventional financing matters. In 1992, Mr. Collins contributed and demonstrated more than 500 pages of suggested design improvements to the Microsoft Excel development team of programmers - and many of those improvements are found in Excel today.

At the University of Georgia, Mr. Collins was elected President of the Phi Eta Sigma Honor Society, was initiated into the BIFTAD Honor Society, served three years in the Judicial Defender/Advocate program, and was a member of Alpha Tau Omega fraternity. At Glynn Academy High School, Mr. Collins was Senior Class President, Class Valedictorian (1 of 6), and received a principle nomination to Annapolis Naval Academy. Mr. Collins has been married for 27 years and has two children. He devotes his leisure time to family, travel, tennis, fishing, snow skiing, and riding motorcycles (both dirt and street). Mr. Collins is president of his homeowners association, participates in the Gwinnett Clean and Beautiful program, and volunteers for Cooperative Ministries food drive.