

Morning Star Computer Training and Consulting

# **Excel 2007 Overview**

## for Illinois Mathematics and Science Academy



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#### **Screen Layout**

When you begin to explore Excel 2007 you will notice a new look. There are four features that you should remember as you work within Excel 2007: the Microsoft Office Button, the Quick Access Toolbar, the Ribbon and the View Choices.



#### **The Office Button**

The Microsoft Office button performs many of the functions that were located in the File menu of older versions of Word.



#### **Quick Access Toolbar**

The quick access toolbar is a customizable toolbar that contains commands that you may want to use. You can place the quick access toolbar above or below the ribbon. To change the location of the quick access toolbar, click on the arrow at the end of the toolbar and click on Show Below the Ribbon.



You can also add items to the quick access toolbar. Right click on any item in the Office Button or the Ribbon and click on Add to Quick Access Toolbar and a shortcut will be added to the Quick Access Toolbar.

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Add to Quick Access Toolbar
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Show Quick Access Toolbar Below the Ribbon
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#### The Ribbon

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The Ribbon is the panel at the top portion of the window. It has seven tabs: Home, Insert, Page Layout, Formulas, Data, Review, and View that contain many new and existing features of Excel. Each tab is divided into groups. The groups are logical collections of features designed to perform functions that you will utilize in developing or editing your Excel spreadsheet. Commonly used features are displayed on the Ribbon, to view additional features within each group, click on the arrow at the bottom right of each group.

#### **Ribbon tabs in Excel:**

tab name	contains information relating to	contains these groups	Office 2003 menu locations
Home	The most commonly used commands in Excel	Clipboard, Font, Alignment, Number, Styles, Cells, Editing	Edit, Format
Insert	Inserting objects into a worksheet	Tables, Illustrations, Charts, Links, Text	Insert, Data
Page Layout	How your data appears on the page	Themes, Page Setup, Scale to Fit, Sheet Options, Arrange	File, Page Setup, View, Format, Window
Formulas	Calculations using formulas and functions	Function Library, Defined Names, Formula Auditing, Calculation	Insert, Tools, Data
Data	Entering, importing, and analyzing data	Get External Data, Connections, Sort & Filter, Data Tools, Outline, Analysis	Tools, Data
Review	Proofing workbooks and collaborating with others	Proofing, Comments, Changes	Insert, Tools
View	Displaying and arranging worksheets, workbooks; working with macros	Workbook Views, Show/Hide, Zoom, Window, Macros	View, Tools, Window
Add-Ins	Varies, depending on installed products	Custom Toolbars	Tools

#### **Dialog Box Launchers**

Some command sets on the Ribbon are also available in traditional style dialog boxes. The presence of a small arrow in the lower right corner of a command set indicates that you can click that "launcher" to display a dialog box containing those commands. For example, if you click the Dialog Box Launcher in the **Font** command set on the **Home** tab, the **Font** dialog box appears with the **Font** tab selected, as shown below.

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**Tip:** You also will find a Dialog Box Launcher available at the bottom of any gallery that shows advanced options.

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#### **View Choices**

To view a spreadsheet in different ways, click the spreadsheet views shortcuts at the bottom of the screen or drag the slider bar + or - .

and



#### To Create a New Document

 Click the Office Button New

You will notice that when you click on the Microsoft Office Button and Click **New**, you have many choices about the types of documents you can create. If you wish to start from a blank spreadsheet, click **Blank**. If you wish to start from a template you can browse through your categories on the left, see the selections within a category in the center screen, and preview the selection on the right screen.



choose

#### **Opening an Existing Workbook**

Click the Microsoft Office Button

and Click **Open,** or

 If you have recently used the document you can click the Microsoft Office Button and click the name of the document in the Recent Documents section of the window

#### Saving a Workbook

Click the Microsoft Office Button and Click Save or Save As (remember, if you're sending the document to someone who does not have Office 2007, you will need to click the Office Button, click Save As, and Click Excel 97-2003 Document)

#### Close a Workbook



Click Close

#### Managing larger data collections

program area	Excel 2003	Excel 2007
Number of columns	256	16,384
Number of rows	65,536	1,048,576
Number of colors	56	16 million
Number of sort levels	3	64
Number of characters in a formula	1,024	8,192
Number of nested levels in formulas	7	64
Number of arguments in a function	30	255
Number of conditional formats	3	Limited only by memory

#### The Mini-toolbar

When you select a cell, you can show or hide a handy, miniature, semitransparent toolbar called the Mini toolbar. The Mini toolbar helps you work with fonts, font styles, font sizing, alignment, text color, indent levels, and bullet features.

Note: You cannot customize the Mini toolbar.

The graphic that follows shows the Mini toolbar at the top of a shortcut menu. And, yes, if you would prefer not to have the Mini toolbar appear, you can turn it off.

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#### **Introducing galleries**

In Excel 2007, you can apply formats to your Excel worksheets, charts, and other objects directly by selecting the appearance you want from a gallery. Excel 2007 has three types of galleries: the dropdown gallery, the grid layout gallery, and the embedded gallery. The following graphics show all three types of galleries.

Regardless of how Excel presents the gallery, you can format your object with one or two mouse clicks. You also have the ability to create custom gallery entries by clicking the New item at the bottom of some galleries and using the dialog box that appears to define your new gallery entry.

Drop-down gallery:



Grid gallery:



Embedded gallery



#### Themes

In the past, it took time to format Microsoft Office documents to match because you had to choose color or style options for your tables, charts, shapes, and diagrams separately. In the 2007 Microsoft Office system, themes simplify the process of creating matching, professional-looking documents not only within one program but across multiple programs. The same themes are now available in Microsoft Office Excel 2007, Microsoft Office PowerPoint 2007, Microsoft Office Word 2007, and Microsoft Office Outlook 2007, and you can easily apply a theme with one click. Use themes to give all of your organization's communications a branded look.



The same theme used in Office PowerPoint 2007, Office Excel 2007, and Office Word 2007

All of your content links to the theme. If you change the theme, a complete set of new colors, fonts, and effects is applied to your entire 2007 Office release document. Themes are an entirely new way to give all of your 2007 Office release documents a modern and professional look. If you created your document in an earlier version of Office, your text or graphics may not be themed and so won't change if you change the theme.

To try different themes, rest your pointer over a thumbnail in the Themes gallery and notice how your document changes.



Four themes that are applied to the same SmartArt graphic. Clockwise from the upper left: Metro, the default Office theme, Apex, and Trek.

**Tip:** You can download additional themes from Microsoft Office Online. In the Themes gallery, click the **More Themes on Microsoft Office Online** link.

Applying a new theme changes the major details of your document. WordArt colors and fonts, but not effects, are applied to titles. Tables, charts, SmartArt graphics, shapes, and other objects are updated to complement one another.

#### **Excel cell styles**

A cell style is a defined set of formatting characteristics, such as fonts and font sizes, number formats, cell borders, and cell shading. To prevent others from changing specific cells, you can also use a cell style that locks cells. Office Excel 2007 has several built-in cell styles that you can apply or modify. You can also modify or duplicate a cell style to create your own custom cell style.

Cell styles are based on the document theme that is applied to an entire workbook. When you switch to another theme, the cell styles are updated to match the new theme. Built-in cell styles are aware of theme fonts, but many are not theme color aware. None of the cell styles are related to theme effects.

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#### Formatting cells and worksheets

Excel has always been a great program for analyzing numerical data, but even Office Excel 2003 came up a bit short in the presentation department. Office Excel 2007 offers vast improvements over the color management and formatting options found in previous versions of the program. You can have as many different colors in a workbook as you like, and you can assign a design theme to a workbook. Assigning a theme to a workbook offers you color choices that are part of a complementary whole, not just a dialog box with no guidance about which colors to choose. You can, still select any color you want when you format your worksheet, define custom cell styles, and create your own themes. The preinstalled themes are there as guides.



### Use Formula AutoComplete

To make it easier to create and edit formulas and minimize typing and syntax errors, use Formula AutoComplete. After you type an = (equal sign) and beginning letters or a display trigger, Microsoft Office Excel displays below the cell a dynamic drop-down list of valid functions, names, and text strings that match the letters or trigger. You can then insert an item in the drop-down list into the formula by using an insert trigger.



**1** Type the = (equal sign) and beginning letters or a display trigger to start Formula AutoComplete.

2 As you type, a scrollable list of valid items is displayed with the closest match highlighted.

**3** Icons represent the type of entry, such as a function or table reference.

**4** Detailed ScreenTips help you make the best choice.

#### Formulas tab

Find all the Formulas that you normally use as well as the new ones located on the Formulas tab in the Function Library group.



#### Managing data tables more effectively

You'll often discover that it makes sense to arrange your Office Excel 2007 data as a table, in which each column contains a specific data element (such as an order number or the hours you worked on a given day), and each row contains data about a specific business object (such as the details of delivery number 1403). In Office Excel 2007, tables enable you to enter and summarize your data efficiently. If you want to enter data in a new table row, all you have to do is type the data in the row below the table. After you press Tab or Enter after typing in the last cell's values, Office Excel 2007 expands the table to include your new data. You can also have Office Excel 2007 display a Totals row, which summarizes your table's data using a function you specify.

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10         Devol         Metheting         Paintering         1386         M         93.181           10         Stability         Stability <td>14</td> <td>Nelson</td> <td>Dale</td> <td>Marketing</td> <td>Full-time</td> <td>198</td> <td>8 M</td> <td>\$54,578</td> <td></td> <td></td> <td></td>	14	Nelson	Dale	Marketing	Full-time	198	8 M	\$54,578			
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19         Prégrado         Extraction         H4         Performe         1980         M         H41,79           19         Prégrado         Extraction         H4         Performe         1980         M         H41,79           19         Prégrado         Extraction         H4         Performe         1980         M         H41,79           17         Young         Jett         H7         Administrative         1980         M         542,617           21         Young         Jett         H7         Administrative         1980         M         542,617           23         Weeks         Jocke         Finance         Monogement         1980         M         542,617           23         Weeks         Jocke         Finance         Performe         1980         F         543,000           23         Weeks         Jocke         Finance         Administrative         1980         M         544,000           24         Mark         Finance         Administrative         1980         M         55,311           23         Mark         Krich         H4         Administrative         1980         M         15,531           24	17	Scheib	Earl	HR	Management	198	B M	\$37,389			
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Street         File         File         File         File         File           Street         File         File <t< td=""><td>12</td><td>Pomenberger</td><td>James</td><td>HR</td><td>Pureme</td><td>193</td><td>U M</td><td>\$01,701</td><td></td><td></td><td></td></t<>	12	Pomenberger	James	HR	Pureme	193	U M	\$01,701			
Chronic         Mathem         Mathm         Mathm         Mathm <td>20</td> <td>Smyne</td> <td>Janice</td> <td>HR</td> <td>Part-sme</td> <td>130</td> <td></td> <td>\$46,667</td> <td></td> <td></td> <td></td>	20	Smyne	Janice	HR	Part-sme	130		\$46,667			
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27         Len         Kell         Finance         Administrative         1984         M         141.00           27         Jakadron         Karreh         Finance         Morganic         1984         M         153.31           29         Mack         Karreh         Finance         Morganic         1989         M         153.31           29         Mack         Karreh         Finance         Morganic         1989         M         452.50           20         Mack         Karreh         Finance         Morganic         1989         M         452.50           20         Rais         May         Finance         Morganicet         1980         F         452.50           20         Rais         May         Finance         Morganicet         1980         F         452.00           21         Rais         Mary         Finance         1980         M         452.00           21         Mary         Finance         Partme         1980         M         450.00           23         Mary         Finance         Partme         1981         M         552.51           20         Mary         Mary         Partme	100	Bordaau	Kathoring	HD	Administration	100	5 E	0.42 311			
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20         Mack         Kevim         HR         Administrative         1989         M         1922,300           20         Advances         Kristen         Modeling         Administrative         1989         M         192,500           31         Silvent         Mack         Marketering         Administrative         1986         M         447,815           31         Silvent         Mack         Marketering         Administrative         1986         M         447,815           33         Silvent         Market         Marketering         Failefreine         1974         M         957,822           31         Bleider         Marketering         Failefreine         1974         M         957,822           31         Bleider         Modeling         Failefreine         1978         M         445,000           35         Wakeve         Robeint         Modeling         Failefreine         1978         M         957,751           30         Baltemo         Starpi         Modeling         Pairfreine         1980         F         455,171           30         Paterine         Starpi         Modeling         Pairfreine         1981         F         557,161	28	Neumann	Kerneth	Enance	Management	196	B M	\$35.381			
30 Anderson         Kristen         Medvetrig         Administrative         1980         F         10.155           30 Shwert         Mesk         Metkering         Administrative         1980         F         27.055           32 Reset         Mesk         Metkering         Administrative         1980         F         27.000           32 Reset         Mesk         Metkering         Full         1980         F         27.000           33 Perkerk         Mesker         Meskering         Full         1980         M         57.000           35 Weiner         Robert         Meskering         Full         1980         M         55.000           35 Weiner         Robert         Meskering         Full         1980         M         55.272           36 Ball         Robert         Meskering         Full         1981         M         55.273           37 Okin         Roger         HR         Mesangenett         1982         M         55.251           39 Methydrogen         Statistic         Particit         Mesangenett         1982         M         55.251           39 Methydrogenet         HR         Mesangenett         1982         M         55.251	29	Mack.	Kevin	HR	Administrative	198	9 M	\$42,500			
31         Silvent         Mark         Marketing         Administrative         1986         M         147.516           32         Reis         Mary         Finance         Maragement         1993         F         427.000           33         Parker         Marker         Marketing         F-141*me         1974         M         457.852           33         Parker         Marker         Marketing         F-141*me         1974         M         457.852           34         Marker         Marketing         F-141*me         1978         M         445.00           35         Warker         Robint         Marketing         F-141*min         1976         M         55.775           36         Ball         Policit         Marketing         M-141*min         1976         M         57.71           36         Ball         Policit         Marketing         Policiting         Marketing         7.21           37         Policiting         Marketing         Policiting         Marketing         7.21           38         Policiting         Policiting         Policiting         9.71         19.71           39         Policing         Stating         F	30	Anderson	Kristen	Marketing	Administrative	198	8 F	\$43,155			
12: Pais         May         Finance         Managament         1933         F         12: 200           33: Pakker         Methew         Methew <td>31</td> <td>Stewart</td> <td>Mark.</td> <td>Marketing</td> <td>Administrative</td> <td>198</td> <td>IS M</td> <td>\$47,616</td> <td></td> <td></td> <td></td>	31	Stewart	Mark.	Marketing	Administrative	198	IS M	\$47,616			
32         Packer         Mefner         Mefner         Mefner         1974         M         1972         M           33         Holpern         Mump         Finance         Packerne         1989         445.00           35         Wener         Robert         Mefnetring         Fillefreine         1998         M         455.075           36         Bell         Robert         Mefnetring         Fillefreine         1997         M         720           37         Dehn         Mediating         Fillefreine         1997         M         455.021           37         Dehn         Robert         Mediating         Fillefreine         1997         M         552.021           37         Dehn         Robert         Mediating         Fillefreine         1998         M         552.021           37         Dehn         Robert         Fillefreine         1998         M         552.021           38         Mediating         Fillefreine         1998         M         552.021           40         Strom         Term         Menogement         1991         M         552.501           41         Metroverr         HR         Menogement <td< td=""><td>32</td><td>Rais</td><td>Mary</td><td>Finance</td><td>Management</td><td>199</td><td>3 F</td><td>\$27,000</td><td></td><td></td><td></td></td<>	32	Rais	Mary	Finance	Management	199	3 F	\$27,000			
34 Halpern         Murrey         Finance         Partne         1983         M         445.000           35 Beat         Robint         Marketing         Full free         1987         M         455.755           36 Beat         Robint         Marketing         Full free         1987         M         455.755           36 Beat         Robint         Marketing         Full free         1981         M         455.231           37 Ohin         Poper         Marketing         Full free         1981         M         455.231           39 Polemo         Sheyt         Marketing         Partnee         1983         F         433.791           40 Simh         Tom         Finance         Full free         1981         F         455.167           41 Hall         Terveri         HR         Managament         1984         F         425.501           42 Gradularium         Vendy         HR         Managament         1984         F         425.501           42 Gradularium         HR         Full free         1984         F         425.501           42 Gradularium         Marketine         1984         F         425.502	33	Parker	Mathew	Marketing	Full-time	197	4 M	\$57,892			
SWeiner         Robert         Metketing         Full fina         1976         M         455.775           SB Ball         Polom         Metketing         Full fina         1976         M         255.721           37 Okim         Roger         Metketing         Full fina         1981         M         551.201           39 Delamic         Standy         Metketing         Pull fina         1986         F         456.101           40 Stroht         Tem         Finance         Filler         1987         M         552.011           40 Stroht         Tem         Finance         Filler         1982         M         552.501           41 Hild         Tenvior         FIR         Menogament         1991         M         255.501           42 Stondizm         Wendy         HR         Menogament         1991         F         255.623           40 Stondizm         Kenning         HR         Full Field         1992         M         355.501           40 Stondizm         Stondizm         Field         Field         1992         M         355.503	34	Halpern	Murrey	Finance	Part-time	198	19 M	\$46,000			
36         Bell         Robin         Medvetrig         Mengament         1987         F         433.723           37         Okin         Doger         Medvetrig         Fulf-time         1981         M         453.231           38         Paterno         Sheyl         Medvetrig         Partrine         1981         F         453.231           39         Paterno         Sheyl         Medvetrig         Partrine         1981         F         453.971           40         Smith         Trom         Finance         Fulf-time         1981         F         453.971           40         Smith         Trom         Finance         Fulf-time         1982         M         457.167           41         Hall         Terveri         HR         Menogament         1984         #         20.25.001           42         Gradobian         Wendy         HR         Menogament         1984         #         20.25.001           42         Gradobian         Kenima         HR         Full-time         1982         #         20.25.001	35	Weaver	Robert	Marketing	Full-time	197	% M	\$55,775			
27. Okim         Poper         Metketing         Full filterie         1991         M         553.231           39. Moltmox         Suisin         HRI         Meangianett         1992         F         445.617           39. Moltmox         Suisin         HRI         Meangianett         1992         F         455.617           39. Moltmox         Suisin         HRI         Meangianett         1993         M         313.737           41. HRI         Terror         HRI         Meangianett         1993         M         315.510           42. Grandszinzi         Wendy         HRI         Meangianett         1994         M         325.501           40. Grandszinzi         Wendy         HRI         Meangianett         1994         F         325.501           40. Grandszinzi         Wendy         HRI         Meangianett         1994         F         325.503           40. Grandszinzi         Wendy         HRI         Kenngianett         1994         F         325.503	36	Ball	Robin	Marketing	Management	198	17 F	\$35,723			
39         Polemo         Sheyl         Modulity         Partime         1980         F         415.617           39         Modye         Sixim         HR         Monogement         1999         F         313.978           40         Simh         Tom         Finance         Full+time         1992         M         457.167           41         Hall         Terveri         HR         Monogement         1993         M         355.509           42         Goobcizion         Wendy         HR         Monogement         1994         F         423.000           42         Goobcizion         Wendy         HR         Full+time         1992         M         455.503	37	Chin	Roger	Marketing	Fulltime	199	1 M	\$59,281			
39         McKnyw         Suisan         HR         Menggimient         1989         F         \$33,379           40         Smith         Tom         Float Com         Float Mine         1972         M         557,167           41         HB         Trevorr         HR         Mengament         1981         M         \$35,590           42         Garabicini         HR         Mengament         1994         F         £28,500           43         Gasa         Xaoning         HR         Mangament         1994         F         £28,500           40         Gasa         Xaoning         HR         Fullemin         1982         M         \$55,623	38	Palermo	Sheryl	Marketing	Part-time	198	8 F	\$45,617			
40_Smnh         Tom         Finance         Full-Kime         1972         M         \$55,167           41         Hill         Trelow HR         Management         1981         M         \$55,569           42         Carobicinin         HR         Management         1984         F         \$25,569           43         Gao         Maximing         HR         Full-Kime         1982         M         \$55,562	39	McKøye	Susan	HR	Management	198	19 F	\$33,979			
41         Hill         Theyor         HR         Monogenent         1991         M         155,500           42         Garobicien         Wendy         HR         Monogenent         1994         F         125,520           32         Garobicien         Wendy         HR         Monogenent         1994         F         125,520           32         Garobicien         Wendy         HR         Full+time         1982         M         195,529	40	Smith	Tom	Finance	Fulltime	197	2 M	\$57,167			
42         Garabizien         Wendy         HR         Management         1994         F         128,500           43         Gao         Xiacming         HR         Full+time         1982         M         155,829	41	Hill	Trevor	HR	Management	195	1 M	\$35,590			
43 Gao Xaoming HR Full-time 1982 M \$55,829	42	Garabizien	Wendy	HR	Management	199	H F	\$28,500			
	43	Gao	Xiaoming	ня	Full-time	198	2 M	\$55,829			

#### **Excel table enhancements**

In Office Excel 2007, you can use the new user interface to quickly create, format, and expand an Excel table (known as an Excel list in Excel 2003) to organize the data on your worksheet so that it's much easier to work with. New or improved functionality for tables includes the following features.

**Table header rows** Table header rows can be turned on or off. When table headers are displayed, they stay visible with the data in the table columns by replacing the worksheet headers when you move around in a long table.

**Calculated columns** A calculated column uses a single formula that adjusts for each row. It automatically expands to include additional rows so that the formula is immediately extended to those rows. All that you have to do is enter a formula once—you don't need to use the Fill or Copy commands.

**Automatic AutoFiltering** AutoFilter is turned on by default in a table to enable powerful sorting and filtering of table data.

**Structured references** This type of reference allows you to use table column header names in formulas instead of cell references, such as A1 or R1C1.

Total rows In a total row, you can now use custom formulas and text entries.

**Table styles** You can apply a table style to quickly add designer-quality, professional formatting to tables. If an alternate-row style is enabled on a table, Excel will maintain the alternating style rule through actions that would have traditionally disrupted this layout, such as filtering, hiding rows, or manual rearranging of rows and columns.

#### Summarizing data using new functions

The Office Excel 2007 programming team encourages users to suggest new capabilities that might be included in the future versions of the program. One of the most common requests from corporations using Excel was to find the average value of cells where the value met certain criteria. For example, in a table summarizing daily sales by department, a formula could summarize sales in the Housewares department for days in which the sales total was more than \$10,000.

The Office Excel 2007 team responded to those requests by creating five new formulas that enable you to summarize worksheet data that meets a given condition. Here are quick descriptions of the new functions and any existing functions to which they're related:

- AVERAGEIF enables you to find the average value of cells in a range for cells that meet a single criterion.
- AVERAGEIFS enables you to find the average value of cells in a range for cells that meet multiple criteria.

- SUMIFS, an extension of the SUMIF function, enables you to find the average value of cells in a range for cells that meet multiple criteria.
- COUNTIFS, an extension of the COUNTIF function, enables you to count the number of cells in a range that meet multiple criteria.
- IFERROR, an extension of the IF function, enables you to tell Excel 2007 what to do in case a cell's formula generates an error (as well as what to do if the formula works the way it's supposed to).

### **Creating better conditional formats**

Businesses often use Excel to track corporate spending and revenue. The actual figures are very important, of course, but it's also useful for managers to be able to glance at their data and determine whether the data exceeds expectations, falls within an acceptable range, or requires attention because the value falls below expectations. In versions prior to Excel 2007, you could create up to three conditions and define a format for each one. For example, you could create the following rules:

- If monthly sales are more than 10 percent ahead of sales during the same month in the previous year, display the value in green;
- If monthly sales are greater than or equal to sales during the same month in the previous year, but are less than 10 percent greater, display the value in yellow;
- If monthly sales are less than sales during the same month in the previous year, display the value in red.

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In Excel 2007 you can have as many rules as you like, apply several rules to a single data value, choose to stop evaluating rules after a particular rule has been applied, and change the order in which the rules are evaluated without having to delete and re-create the rules you change. As shown in the figure, you can also apply several new types of conditional data formats: data bars, which create a horizontal bar across a cell indicating how large the value is; color gradients, which change a cell's fill color to indicate

how large the value is; and icon sets, which display one of the available icons depending on the guidelines you establish.

#### **Creating more attractive charts**

Office Excel 2007 enables you to manage large amounts of numerical data effectively, but humans generally have a hard time determining patterns from that data if all they have to look at are the raw numbers. That's where charts come in. Charts summarize your data visually, which means that you and other decision-makers can quickly detect trends, determine high and low data points, and forecast future prospects using mathematical tools. The Excel charting engine and color palette haven't changed significantly since Excel 97, but Office Excel 2007 marks a tremendous step forward with more ways to create attractive and informative charts quickly.



Select the type of chart you would like to use from the Insert tab, Charts group.



#### **Controlling printouts more carefully**

One of the Office Excel 2007 product group's goals for Office Excel 2007 was to enable you to create great-looking documents. Of course, to create these documents, you must know what your documents will look like when you print them. The Microsoft Excel team introduced the Page Break Preview view in Excel 97; however it is somewhat limited from a printing control and layout perspective. In Office Excel 2007 when you display a workbook in Page Layout view, you see exactly what your work will look like on the printed page. The Page Layout view also enables you to change your workbook's margins, add and edit headers and footers, and edit your data.



#### Create a SmartArt graphic

A SmartArt graphic is a visual representation of your information that you can quickly and easily create, choosing from among many different layouts, to effectively communicate your message or ideas.



Before you create your SmartArt graphic, visualize what type and layout are best for displaying your data. What do you want to convey with your SmartArt graphic? Do you want a certain look? Since you can quickly and easily switch layouts, try different layouts (across types) until you find the one that best illustrates your message. Your graphic should be clear and easy to follow. Experiment with different types by using the table below as a starting point. The table is intended to help you get started and is not an exhaustive list.

Purpose of SmartArt graphic	Graphic type
Show non-sequential information	List
Show steps in a process or timeline	Process
Show a continual process	Cycle
Show a decision tree	Hierarchy
Create an organization chart	Hierarchy
Illustrate connections	Relationship
Show how parts relate to a whole	Matrix
Show proportional relationships with the largest component on the top or bottom	Pyramid

Also, consider the amount of text that you have, because the amount of text often determines the layout that you use and how many shapes you need in the layout. In general, SmartArt graphics are most effective when the number of shapes and the amount of text are limited to key points. Larger amounts of text can distract from the visual appeal of your SmartArt graphic and make it harder to convey your message visually. However, some layouts, such as **Trapezoid List** in the **List** type, work well with larger amounts of text.

Some layouts for SmartArt graphics contain a fixed number of shapes. For example, the **Counterbalance Arrows** layout in the **Relationship** type is designed to show two opposing ideas or concepts. Only two shapes can contain text, and the layout cannot be changed to display more ideas or concepts.



If you need to convey more than two ideas, switch to another layout that has more than two shapes for text, such as the **Basic Pyramid** layout in the **Pyramid** type. Keep in mind that changing layouts or types can alter the meaning of your information. For example, a layout with arrows pointing to the right, such as **Basic Process** in the **Process** type, has a different meaning from a SmartArt graphic with arrows going in a circle, such as **Continuous Cycle** in the **Cycle** type.

#### **Remove duplicate values**

When you remove duplicate values, only the values in the range of cells or table are affected. Any other values outside the range of cells or table are not altered or moved.

**Caution** Because you are permanently deleting data, it's a good idea to copy the original range of cells or table to another worksheet or workbook before removing duplicate values.

- 1. Select the range of cells, or make sure that the active cell is in a table.
- 2. On the Data tab, in the Data Tools group, click Remove Duplicates.



- 3. Do one or more of the following:
  - Under **Columns**, select one or more columns.
  - To quickly select all columns, click Select All.
  - To quickly clear all columns, click **Unselect All**.

If the range of cells or table contains many columns and you want to only select a few columns, you may find it easier to click **Unselect All**, and then under **Columns**, select those columns.

4. Click **OK**.

A message is displayed indicating how many duplicate values were removed and how many unique values remain, or if no duplicate values were removed.

5. Click **OK**.

#### **Conditionally format unique or duplicate values**

**Note** You cannot conditionally format fields in the Values area of a PivotTable report by unique or duplicate values.

#### **Quick formatting**

- 1. Select one or more cells in a range, table, or PivotTable report.
- 2. On the **Home** tab, in the **Style** group, click the arrow next to **Conditional Formatting**, and then click **Highlight Cells Rules**.



- 3. Select Duplicate Values.
- 4. Enter the values that you want to use, and then select a format.

#### Define a name by using the New Name dialog box

The Name Manager dialog box makes it much easier to see all your named ranges and to specify any specific parameters associated with the name.

Name Mar	nager				? ×
<u>N</u> ew	. <u>E</u> dit	Delete	]		<u>Filter</u> •
Name	Value		Refers To	Scope	Comment
IIII Table	1 {"Smith","A	Alicia", "M	='Sales Reps'!\$A\$3	Workbook	
Refers to:					
×	='Sales Reps'!\$A\$3:\$G\$4	43			
					Close

1. On the **Formulas** tab, in the **Defined Names** group, click **Define Name**.



2. In the **New Name** dialog box, in the **Name** box, type the name that you want to use for your reference.

Note Names can be up to 255 characters in length.

- 3. To specify the scope of the name, in the **Scope** drop-down list box, select **Workbook** or the name of a worksheet in the workbook.
- 4. Optionally, in the **Comment** box, enter a descriptive comment up to 255 characters.

**Note** If you save the workbook to Microsoft Office SharePoint Server 2007 Excel Services, and you specify one or more parameters, the comment is used as a ScreenTip in the **Parameters** Task Pane.

- 5. In the **Refers to** box, do one of the following:
  - To enter a cell reference, type the cell reference.

Tip The current selection is entered by default. To enter other cell references as an argument, click Collapse Dialog (which temporarily shrinks the dialog box), select the cells on the worksheet, and then click Expand Dialog .

- To enter a constant, type = (equal sign) and then type the constant value.
- To enter a formula, type = and then type the formula.
- 6. To finish and return to the worksheet, click **OK**.

**Tip** To make the **New Name** dialog box wider or longer, click and drag the grip handle at the bottom.

#### New file formats

**XML-based file format** In 2007 Microsoft Office system, Microsoft is introducing new file formats for Word, Excel, and PowerPoint, known as the Office Open XML formats. These new file formats facilitate integration with external data sources, and also offer reduced file sizes and improved data recovery. In Office Excel 2007, the default format for an Excel workbook is the Office Excel 2007 XML-based file format (.xlsx). Other available XML-based formats are the Office Excel 2007 XML-based and macro-enabled file format (.xlsm), the Office Excel 2007 file format for an Excel template (.xltx), and the Office Excel 2007 macro-enabled file format for an Excel template (.xltm).

**Office Excel 2007 binary file format** In addition to the new XML-based file formats, Office Excel 2007 also introduces a binary version of the segmented compressed file format for large or complex workbooks. This file format, the Office Excel 2007 Binary (or BIFF12) file format (.xls), can be used for optimal performance and backward compatibility.

**Compatibility with earlier versions of Excel** You can check an Office Excel 2007 workbook to see if it contains features or formatting that are not compatible with an earlier version of Excel so that you can make the necessary changes for better backward compatibility. In earlier versions of Excel, you can install updates and converters that help you open an Office Excel 2007 workbook so that you can edit it, save it, and open it again in Office Excel 2007 without losing any Office Excel 2007-specific functionality or features.

## Find your favorite Excel 2003 commands in the new Excel 2007 interface

#### File Menu

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
File > New	Office button > New	Ctrl-N
File > Open	Office button > Open	Ctrl-O
File > Close	Office button > Close	Ctrl-W
File > Save	Office button > Save <i>or</i> Quick Access tool bar > Save icon	Ctrl-S
File > Save As	Office button > Save As	F12
File > Save As Web Page	Office button > Save As (in Save As dialog, choose Web Page from Save As Type drop-down)	<i>In Excel 2003:</i> Alt-F, G <i>In Excel 2007:</i> F12 (in Save As dialog, choose Web Page from Save As Type drop-down)
File > Save Workspace	View > Window > Save Workspace	In Excel 2003: Alt-F, W In Excel 2007: Alt-W, K
File > File Search	Windows Start button > Search	<i>In Excel 2003:</i> Alt-F, H <i>In Excel 2007:</i> Window key, C
File > Permission	Office button > Prepare > Restrict Permission	In Excel 2003: Alt-F, M In Excel 2007: Alt-F, E, R
File > Web Page Preview	Add to Quick Access tool bar: Office button > Excel Options > Customize > All Commands > Web Page Preview	In Excel 2003: Alt-F, B In Excel 2007: Alt- [number of position in Quick Access tool bar]
File > Page Setup	Page Layout > Page Setup (click dialog box launcher for more options) <i>or</i> Office button > Print > Print Preview > Page Setup icon	<i>In Excel 2003:</i> Alt-F, U <i>In Excel 2007:</i> Alt-P, SP

File > Print Area	Page Layout > Page Setup > Print Area	<i>In Excel 2003:</i> Alt-F, T <i>In Excel 2007:</i> Alt-P, R
File > Print Preview	Office button > Print > Print Preview	In Excel 2003: Alt-F, V In Excel 2007: Alt-F, W, V
File > Print	Office button > Print	Ctrl-P
File > Send To	Office button > Send (for more Send options, see Office button > Excel Options > Customize > All Commands)	Alt-F, D
File > Most Recently Used Documents	Office button > Recent Documents	Alt-F

#### **Edit Menu**

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Edit > Undo	Quick Access tool bar > Undo icon	Ctrl-Z
Edit > Redo	Quick Access tool bar > Redo icon	Ctrl-Y
Edit > Cut	Home > Clipboard > Cut	Ctrl-X
Edit > Copy	Home > Clipboard > Copy	Ctrl-C
Edit > Office Clipboard	Home > Clipboard dialog box launcher	In Excel 2003: Alt-E, B In Excel 2007: Alt-H, FO
Edit > Paste	Home > Clipboard > Paste	Ctrl-V
Edit > Paste Special	Home > Clipboard > Paste > Paste Special	<i>In Excel 2003:</i> Alt-E, S <i>In Excel 2007:</i> Alt-E, S <i>or</i> Alt-Ctrl-V
Edit > Paste as Hyperlink	Home > Clipboard > Paste > Paste as Hyperlink	Alt-E, H
Edit > Fill	Home > Editing > Fill	In Excel 2003: Alt-E, I In Excel 2007: Alt-H, FI
Edit > Clear	Home > Editing > Clear	<i>In Excel 2003:</i> Alt-E, A <i>In Excel 2007:</i> Alt-H, E
Edit > Delete	Home > Cells > Delete	<i>In Excel 2003:</i> Alt-E, D <i>In Excel 2007:</i> Alt-H, D

Edit > Delete Sheet	Home > Cells > Delete > Delete Sheet	<i>In Excel 2003:</i> Alt-E, L <i>In Excel 2007:</i> Alt-H, D, S
Edit > Move or Copy Sheet	Home > Cells > Format > Move or Copy Sheet	<i>In Excel 2003:</i> Alt-E, M <i>In Excel 2007:</i> Alt-H, O, M
Edit > Find	Home > Editing > Find & Select > Find	Ctrl-F
Edit > Replace	Home > Editing > Find & Select > Replace	Ctrl-H
Edit > Go To	Home > Editing > Find > Find & Select > Go To	Ctrl-G

#### View Menu

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
View > Normal	View > Workbook Views > Normal	<i>In Excel 2003:</i> Alt-V, N <i>In Excel 2007:</i> Alt-W, L
View > Page Break Preview	View > Workbook Views > Page Break Preview	In Excel 2003: Alt-V, P In Excel 2007: Alt-W, I
View > Task Pane	The overall task pane is gone in Excel 2007, but some dialog box launchers display task panes.	<i>In Excel 2003:</i> Ctrl-F1 <i>In Excel 2007:</i> not available
View > Tool bars	Excel 2007 no longer has tool bars.	<i>In Excel 2003:</i> Alt-V, T <i>In Excel 2007:</i> not available
View > Formula Bar	View > Show/Hide > Formula Bar	Alt-V, F
View > Status Bar	The Status Bar is always visible.	<i>In Excel 2003:</i> Alt-V, S <i>In Excel 2007:</i> not available
View > Header and Footer	Insert > Text > Header & Footer	Alt-V, H
View > Comments	Review > Comments > Show All Comments	Alt-V, C
View > Custom	View > Workbook Views > Custom Views	In Excel 2003: Alt-V, V

Views		In Excel 2007: Alt-W, C
View > Full Screen	View > Workbook Views > Full Screen	Alt-V, U
View > Zoom	View > Zoom > Zoom	Alt-V, Z

#### **Insert Menu**

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Insert > Cells	Home > Cells > Insert > Insert Cells	Alt-I, E
Insert > Rows	Home > Cells > Insert > Insert Sheet Rows	Alt-I, R
Insert > Columns	Home > Cells > Insert > Insert Sheet Columns	Alt-I, C
Insert > Worksheet	Home > Cells > Insert > Insert Sheet	Alt-I, W
Insert > Chart	Insert > Charts	Alt-I, H
Insert > Symbol	Insert > Text > Symbol	In Excel 2003: Alt-I, S In Excel 2007: Alt-I, S or Alt-N, U
Insert > Page Break	Page Layout > Page Setup > Breaks > Insert Page Break	Alt-I, B
Insert > Function	Formulas > Function Library > Insert Function	<i>In Excel 2003:</i> Alt-I, F <i>In Excel 2007:</i> Alt-I, F <i>or</i> Alt-M, F
Insert > Name	Formulas > Defined Names	<i>In Excel 2003:</i> Alt-I, N <i>In Excel 2007:</i> Alt-M, M
Insert > Comment	Review > Comments > New Comment	In Excel 2003: Alt-I, M In Excel 2007: Alt-I, M or Alt-R, C
Insert > Picture	Insert > Illustrations	In Excel 2003: Alt-I, P In Excel 2007: Alt-N, [letter depends on type of art inserted]
Insert > Diagram	Insert > Illustrations > SmartArt	In Excel 2003: Alt-I, G In Excel 2007: Alt-N, M

Insert > Object	Insert > Text > Object	Alt-I, O
Insert > Hyperlink	Insert > Links > Hyperlink	Ctrl-K

#### Format Menu

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Format > Cells	Home > Cells > Format > Format Cells	Alt-O, E
Format > Row	Home > Cells > Format	<i>In Excel 2003:</i> Alt-O, R <i>In Excel 2007:</i> Alt-H, O
Format > Column	Home > Cells > Format	<i>In Excel 2003:</i> Alt-O, C <i>In Excel 2007:</i> Alt-H, O
Format > Sheet	Home > Cells > Format	In Excel 2003: Alt-O, H In Excel 2007: Alt-H, O
Format > AutoFormat	Home > Styles > Format as Table	<i>In Excel 2003:</i> Alt-O, A <i>In Excel 2007:</i> Alt-O, A <i>or</i> Alt-H, T
Format > Conditional Formatting	Home > Styles > Conditional Formatting	<i>In Excel 2003:</i> Alt-O, D <i>In Excel 2007:</i> Alt-O, D <i>or</i> Alt-H, L
Format > Style	Home > Styles > Cell Styles	<i>In Excel 2003:</i> Alt-O, S <i>In Excel 2007:</i> Alt-O, S <i>or</i> Alt-H, J

#### **Tools Menu**

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Tools > Spelling	Review > Proofing > Spelling	F7
Tools > Research	Review > Proofing > Research	Alt-Click
Tools > Error Checking	Formulas > Formula Auditing > Error Checking	Alt-T, K
Tools > Speech	Not in Excel 2007	<i>In Excel 2003:</i> Alt-T, H <i>In Excel 2007:</i> not available
Tools > Shared Workspace	Office button > Publish > Create Document Workspace	Alt-T, D
Tools > Share Workbook	Review > Changes > Share Workbook	<i>In Excel 2003:</i> Alt-T, B <i>In Excel 2007:</i> Alt-T, B <i>or</i> Alt-R, W
Tools > Track Changes	Review > Changes > Track Changes	<i>In Excel 2003:</i> Alt-T, T <i>In Excel 2007:</i> Alt-R, G
Tools > Compare and Merge Workbooks	Add to Quick Access tool bar: Office button > Excel Options > Customize > All Commands > Compare and Merge Workbooks	Alt-T, W
Tools > Protection	Review > Changes	<i>In Excel 2003:</i> Alt-T, P <i>In Excel 2007:</i> Alt-R, [ <i>letter</i> <i>depends on type of</i> <i>protection</i> ]
Tools > Online Collaboration	Not in Excel 2007	In Excel 2003: Alt-T, N In Excel 2007: not available
Tools > Goal Seek	Data > Data Tools > What-If Analysis > Goal Seek	Alt-T, G
Tools > Scenarios	Data > Data Tools > What-If Analysis > Scenario Manager	Alt-T, E
Tools > Formula Auditing	Formulas > Formula Auditing	<i>In Excel 2003:</i> Alt-T, U <i>In Excel 2007:</i> Alt-M, <i>[letter</i> <i>depends on type of</i>

		formula auditing]
Tools > Macro	View > Macros > Macros <i>or</i> Developer > Code > Macros	<i>In Excel 2003:</i> Alt-T, M <i>In Excel 2007:</i> Alt-W, M
Tools > Add-Ins	Office button > Excel Options > Add-Ins	Alt-T, I
Tools > AutoCorrect Options	Office button > Excel Options > Proofing > AutoCorrect Options	Alt-T, A
Tools > Customize	Office button > Excel Options > Customize	<i>In Excel 2003:</i> Alt-T, C <i>In Excel 2007:</i> Alt-F, I, C
Tools > Options	Office button > Excel Options	In Excel 2003: Alt-T, O In Excel 2007: Alt-T, O or Alt-F, I

#### Data Menu

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Data > Sort	Data > Sort & Filter > Sort or Home > Editing > Sort & Filter > Sort	In Excel 2003: Alt-D, S In Excel 2007: Alt-A, S
Data > Filter	Data > Sort & Filter > Filter <i>or</i> Home > Editing > Sort & Filter > Filter	<i>In Excel 2003:</i> Alt-D, F <i>In Excel 2007:</i> Alt-A, T
Data > Form	Add to Quick Access tool bar: Office button > Excel Options > Customize > All Commands > Form	In Excel 2003: Alt-D, O In Excel 2007: Alt-[number of position in Quick Access tool bar]
Data > Subtotals	Data > Outline > Subtotal	<i>In Excel 2003:</i> Alt-D, B <i>In Excel 2007:</i> Alt-D, B <i>or</i> Alt- A, B
Data > Validation	Data > Data Tools > Data Validation	<i>In Excel 2003:</i> Alt-D, L <i>In Excel 2007:</i> Alt-D, L <i>or</i> Alt- A, V
Data > Table	Data > Data Tools > What-If Analysis > Data Table	Alt-D, T
Data > Text to	Data > Data Tools > Convert Text to Table	In Excel 2003: Alt-D, E

Columns		<i>In Excel 2007:</i> Alt-D, E <i>or</i> Alt-A, E
Data > Consolidate	Data > Data Tools > Consolidate	<i>In Excel 2003:</i> Alt-D, N <i>In Excel 2007:</i> Alt-D, N <i>or</i> Alt-A, N
Data > Group and Outline	Data > Outline	In Excel 2003: Alt-D, G In Excel 2007: Alt-A, [letter depends on group/outline selection]
Data > PivotTable and PivotChart Report	Insert > Tables > PivotTable > PivotTable/PivotChart	Alt-D, P
Data > Import External Data	Data > Get External Data	In Excel 2003: Alt-D, D In Excel 2007: Alt-A, [letter depends on data source]
Data > List	Data > Get External Data	Ctrl-L
Data > XML	Developer > XML	In Excel 2003: Alt-D, X In Excel 2007: Alt-L, X (when Developer tab is showing)
Data > Refresh Data	Data > Connections > Refresh All > Refresh All	<i>In Excel 2003:</i> Alt-D, R <i>In Excel 2007:</i> Alt-A, R, A

#### Window Menu

Excel 2003 Location	Excel 2007 Location	Keyboard Shortcut
Window > New Window	View > Window > New Window	Alt-W, N
Window > Arrange	View > Window > Arrange All	Alt-W, A
Window > Compare Side by Side with	View > Window > View Side by Side	Alt-W, B
Window > Hide	View > Window > Hide	Alt-W, H
Window > Unhide	View > Window > Unhide	Alt-W, U
Window > Split/Remove Split	View > Window > Split/Remove Split	Alt-W, S (toggle)
Window > Freeze Panes/Unfreeze Panes	View > Window > Freeze Panes > Freeze Panes/Unfreeze Panes	<i>In Excel 2003:</i> Alt-W, F (toggle) <i>In Excel 2007:</i> Alt-W, F, F (toggle)
Window > Currently Open Workbooks	View > Window > Switch Windows	<i>In Excel 2003:</i> Alt-W <i>In Excel 2007:</i> Alt-W, W